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ASTRONAUTICA AD PACEM HOMINUMQUE PROGRESSUM

IAC

69TH INTERNATIONAL ASTRONAUTICAL CONGRESS BREMEN 2018

1 - 5 OCTOBER 2018 | GERMANY

TECHNICAL PROGRAMME

- Technical Sessions
- Special Sessions
- Symposium Keynotes
- Interactive Presentations

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BREMEN CITY OF SPACE

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TEAM GERMANY SUPPORTS IAC 69TH INTERNATIONAL ASTRONAUTICAL CONGRESS BREMEN | 1-5 OCTOBER 2018 #INVOLVING EVERYONE

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IAC BREMEN 2018

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TECHNICAL PROGRAMME TP

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1 Welcome Message

Message from the IAF Vice President for Technical Activities

It is an unrivaled opportunity to get up to speed with the latest developments, foray into new fields and emerging topics, and network with colleagues to strengthen partnerships and foster new collaborations. It is with these goals in mind for you that we welcome you to the 69th International Astronautical Congress #IAC2018, and to Bremen, one of the world's most dynamic and smart cities. Over the years, Bremen has established itself as a major research venue where numerous key results in the area of space have appeared.

The year 2018 is very special to IAC. The congress theme, #InvolvingEveryone, has been carefully chosen to mark a milestone of our space community, offering the world's most extensive and multidisciplinary Technical Programme which reflects the diversity of disciplines within space.

Indeed, in keeping with this year's theme, we have developed the strongest Technical Programme up-to-date with 2100+ oral presentations spread over 179 technical sessions and 400+ interactive presentations. This year we had a record number of abstracts submissions (4340+), making this congress the most competitive yet, though it also forced us to decline some very good abstracts. All the papers accepted to the Technical Programme are of the highest standard, and deserve their place.

Reflecting and emphasizing the theme of IAC 2018 #InvolvingEveryone, this year's congress will see the introduction of exciting and fresh formats: Special Sessions. The new elements are designed to be innovative, interactive, instructive and inclusive with the main objective to enhance knowledge transfer between experts and participants, as well as to maximize group interaction and promote collaborative learning. The IPC Steering Group has selected 31 Special Sessions that stand out for their creativity and bursting interaction. The Special Sessions will consist of in-depth workshops, best practice showcases and demonstrations, discussions and debates, elevator pitches, expert presentations and networking sessions. The new stimulating formats will offer more interactive and hands-on experiences, and will bring you a powerful and engaging learning experience.

The selected 400 presenters will be at their IP stations on Thursday, giving attendees the chance to ask questions and presenters the opportunity to receive feedback on their work. A visit in the IP Hall is truly an interactive experience. This flexible presentation format has grown in popularity enabling a dynamic, multifaceted and digital content that attracts, engages, and informs the viewers. Do not miss this opportunity to start one-on-one conversations, and connect with your fellow attendees and researchers. The five best Interactive Presentations will be rewarded with the prestigious IAF IP Award, IAF's highest form of recognition for excellent research, creativity and originality. Awards will be presented at the IP Award Ceremony.

We are also delighted to have sixteen inspiring Symposium Keynotes, over the five days of the congress, from outstanding experts. These high-profile symposia present the key leaders and top trends impacting the space community.

To put a Technical Programme of this magnitude together is no easy task. To that end, we would like to extend our deepest appreciation to the Keynote Speakers, Special Sessions Organizers and Speakers, the entire International Programme Committee, the Steering Group Committee and the Local Organizing Committee. The Technical Programme could not achieve its success without their tremendous efforts, hard work, commitment and striving for excellence.

A congress is nothing without its authors and its participants. So we would finally like to thank the IAC Community for continuing to support this congress by submitting excellent papers and attending an exciting week of activities in Bremen. We rely on you to make this congress interactive, engaging, and thought-provoking for everyone involved.

We are very pleased to welcome you to IAC 2018 and hope you will find this year's event full of stimulating ideas and discussions!

Otto Koudelka
VP Technical Activities,
International Astronautical Federation (IAF),
Austria

2 Information

2.1 Information for Authors

All authors are asked to upload their manuscripts and multimedia presentations prior to the Congress in order to make them available to all participants on the online Proceedings of the 69th IAC. You can still update your manuscripts through the IAF platform: www.iafastro.net and multimedia presentations with the latest developments in the Speaker Preparation Room.

Your presentation will be automatically preloaded on the computer in the Technical Session Room. Please note that speakers are not allowed to insert USB memory sticks into the computers in the Technical Session rooms. Therefore, all updates need to be uploaded before the Technical Session takes place.

Our help desk team will assist you in uploading presentations during operating hours. Speakers are requested to report to their allocated Technical Session room 20 minutes prior to the start of their session to meet with their Session Chair and to check their presentation. Do not forget to bring two printed courtesy copies of your manuscript and a backup-copy of your presentation. Some Session Chairs might also ask you for a short biography to introduce you at the session.

2.2 Congress Proceedings

The IAC 2018 proceedings are available on a password protected site.

The Congress participants will be provided on on Monday 1 October with a link and online password to login and access the congress proceedings.

If you did not receive the password, please contact : support@iafastro.org

Please note: the congress proceedings contain only those papers that were submitted for publication by congress presenters and may not contain all papers presented at the congress.

IAC papers will be indexed in the largest cited reference enhanced multidisciplinary databases: Elsevier's SCOPUS and Compendex.

2.3 Speaker Preparation Room

Location: Bremen Exhibition and Conference Center - Central Area

Authors who missed the deadline for presentation submission (24 September) or who wish to update/review their presentation can do so in the Speaker Preparation Room.

Authors are required to bring a back-up copy of their presentation on a USB Memory Stick. Video content should be saved as separate files.

Opening hours:
Sunday 30 September, 14:00-18:00
Monday 1 October - Thursday 4 October, 08:30-18:00
Friday 5 October, 08:30-13:00

2.4 IAF App

The full Technical Programme is also incorporated within the IAF App, which we believe will make it easier to follow the entire content and enable you to best plan your participation and choose the events from the Technical Programme to attend.
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2.5 Certificates of Attendance and Presentation

Certificates of Attendance and Presentation are available on request at the IAF Secretariat Office (Central Area - Office 7).
Claims of hours of applicability toward professional education requirements are the responsibility of the participant.

2.6 Acta Astronautica

Chairpersons/Rapporteurs of IAC Technical Sessions can preselect from their session a few high quality papers (up to 2 or 3 per session) for inclusion in the peer reviewing as a regular article of the Acta Astronautica (AA) Journal.

Questions about Acta Astronautica can be addressed to the International Academy of Astronautics:

Rock Jeng-Shing Chern, Editor-in-Chief: editor-in-chief@iaamail.org

Eva Yi-Wei Chang, Managing Editor: managing-editor@iaamail.org

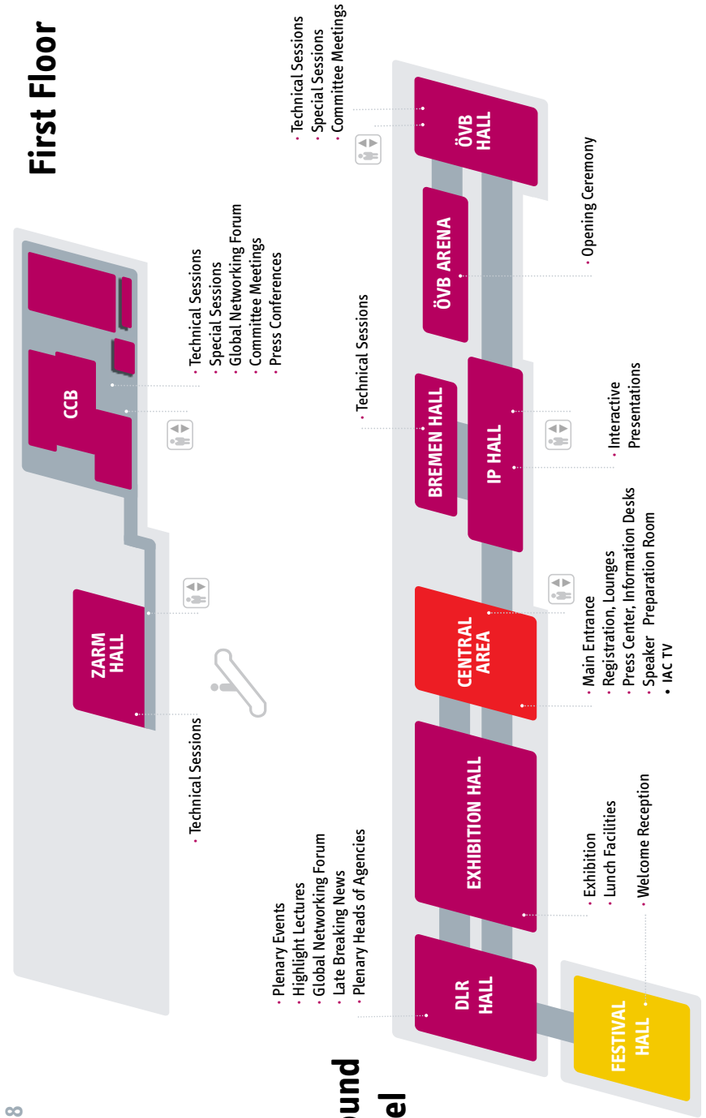
2.7 Contact and Support

Technical Sessions: support@iafastro.org

Special Sessions: SpS@iafastro.org

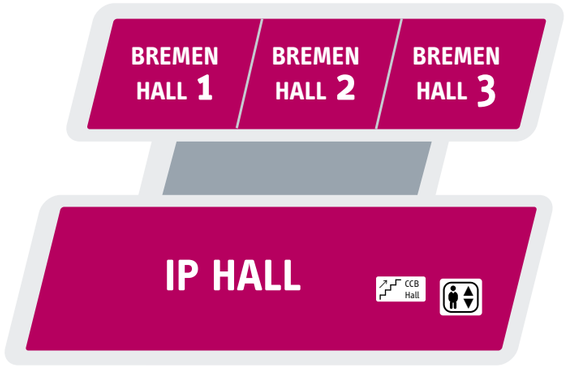
Interactive Presentations: ipsupport@iafastro.org

2.8 Congress Venue Floor Plans



Bremen Hall
Technical Sessions

IP Hall
Interactive Presentations

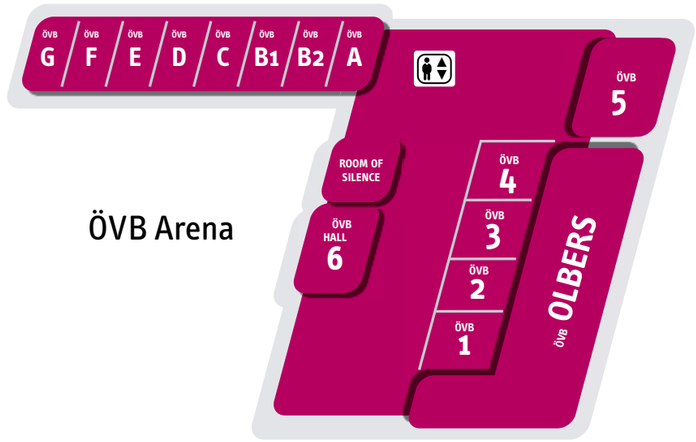


CCB Hall
Technical Sessions, Special Sessions,
Global Networking Forum,
Committee Meetings, Press Conferences

Central Area
Main Entrance
Registration
Lounges
Press Center
Information Desks
Speaker Preparation Room
IAFastro App Counter
IAC TV

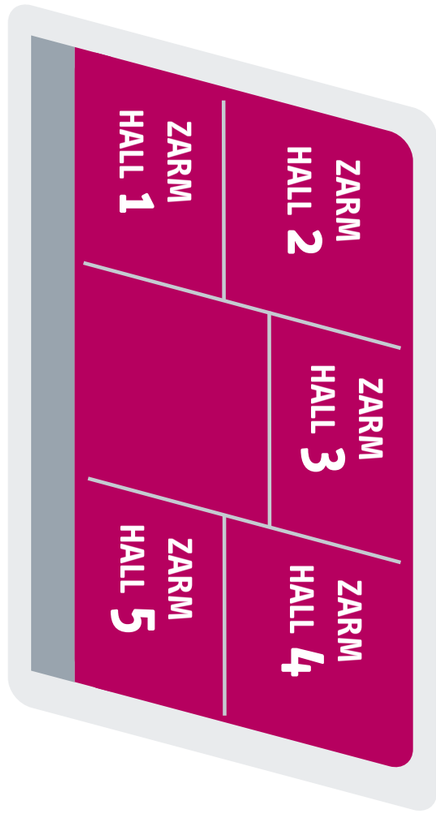
ÖVB HALL
Technical Sessions
Special Sessions
Committee Meetings

ÖVB Arena



ZARM Hall

Technical Sessions



3 Technical Sessions

3.1 Technical Sessions at a Glance

01/10/2018	02/10/2018	02/10/2018	03/10/2018	03/10/2018	04/10/2018	04/10/2018	05/10/2018	05/10/2018
15:00-18:00	09:45-12:45	14:45-17:45	09:45-12:45	14:45-17:45	09:45-12:45	14:45-17:45	09:45-12:45	13:30-16:30
A3.1	A3.2A	A3.2B	A3.3A	A3.3B	A3.4A	A3.5	A3.2C	A3.4B
D2.1	D2.2	D2.7	D2.3	D2.4	D2.5	D2.6	D2.8/A5.4	D6.2/D2.9
C1.1	C1.2	C1.3	C1.4	C1.5	C1.6	C1.7/A6.10	C1.8	C1.9
A6.1	A6.2	A6.4	A6.3	A6.9	A6.5	A6.6	A6.7	A6.8
B4.2	B4.1	B4.3	B4.4	B4.5	B4.6A	B4.6B	B4.8	B4.7
B1.1	B1.2	B1.3	A5.2	A5.1	B1.5	D5.3	B1.4	D5.4
B3.1	B3.2	B3.3	B3.4/B6.4	C3.3	B3.5	B3.6/A5.3	B3.7	B3.8/E7.7
C4.1	C4.2	C4.9	C4.3	C4.4	C4.5	C4.6	C4.7/C3.5	C4.8/B4.5A
C2.1	C2.2	C2.3	C2.4	C2.5	C2.6	C2.7	C2.8	C2.9
C3.1	C3.2	E5.1	E5.3	E5.2	E5.4	E5.5	B6.2	
A1.1	A1.2	A1.3	A1.4	A1.5	A1.6	C3.4	A1.7	A1.8
E1.6	E1.3	E1.4	E1.8	E1.5	E1.7	E1.9	E1.1	E1.2
D3.1	D4.1	D3.2	D4.2	D3.3	D4.3	D3.4	D4.4	D4.5
B5.1	E7.1	E7.2	E7.3	E7.4	B5.2	B5.3	E7.5	C4.10
B2.1	B2.2	A4.1	B2.3	B2.4	B2.5	B2.6	B2.7	A4.2
B6.3	E3.1	E3.2	E3.3	E3.4	E3.5/E7.6	B6.1	E3.6	
A2.1	A2.2	D5.1	D5.2	A2.3	A2.4	A2.5	A2.6	A2.7
A7.1	E6.1	E4.1	A7.2	E6.2	E4.2	A7.3	E6.3	E4.3A/E4.3B
D1.1	D1.2	D1.3	E2.2	E2.4	D1.4A	D1.4B	D1.5	D1.6
E2.3/GTS.4	E2.1	B2.8/GTS.3	D6.1	B3.9/GTS.2	D6.3	B1.6/GTS.1	E8.1	B4.9/GTS.5

Category A: Science & Exploration	A1--> A7	Category C: Technology	C1--> C4	Category E: Space & Society	E1--> E8
Category B: Applications & Operations	B1--> B6	Category D: Infrastructure	D1--> D6		

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3.3 Technical Sessions per Day

Monday 1 October 2018

15:00 - 18:00 Technical Sessions

No.	Title	Room
A1.1	Behaviour, Performance and Psychosocial Issues in Space	CCB Danzig
A2.1	Gravity and Fundamental Physics	Bremen 2
A3.1	Space Exploration Overview	CCB Kaisen
A6.1	Space Debris Detection, Tracking and Characterization	ZARM 1
A7.1	Space Agency Strategies and Plans	CCB Roselius
B1.1	International Cooperation in Earth Observation Missions	ZARM 3
B2.1	Advanced Space Communications and Navigation Systems	ÖVB 3
B3.1	Governmental Human Spaceflight Programs (Overview)	ZARM 4
B4.2	Small Space Science Missions	ZARM 2
B5.1	Tools and Technology in Support of Integrated Applications	Bremen 3
B6.3	Mission Operations, Validation, Simulation and Training	CCB Franzius
C1.1	Orbital Dynamics (1)	CCB Borgward
C2.1	Space Structures I - Development and Verification (Space Vehicles and Components)	ÖVB 2
C3.1	Solar Power Satellite	CCB Bergen
C4.1	Propulsion System (1)	ZARM 5
D1.1	Innovative and Visionary Space Systems	CCB London
D2.1	Launch Vehicles in Service or in Development	CCB Lloydsaal
D3.1	Strategies & Architectures as the Framework for Future Building Blocks in Space Exploration and Development	Bremen 1
E1.6	Calling Planet Earth - Space Outreach to the General Public	CCB Scharoun
E2.3-GTS.4	Student Team Competition	ÖVB 4

Tuesday 2 October 2018

09:45 - 12:45 Technical Sessions

No.	Title	Room
A1.2	Human Physiology in Space	CCB Danzig
A2.2	Fluid and Materials Sciences	Bremen 2
A3.2A	Moon Exploration – Part 1	CCB Kaisen
A6.2	Modelling and Risk Analysis	ZARM 1
B1.2	Future Earth Observation Systems	ZARM 3
B2.2	Fixed and Broadcast Communications	ÖVB 3
B3.2	Commercial Human Spaceflight Programs	ZARM 4
B4.1	19th Workshop on Small Satellite Programmes at the Service of Developing Countries	ZARM 2
C1.2	Orbital Dynamics (2)	CCB Borgward
C2.2	Space Structures II - Development and Verification (Deployable and Dimensionally Stable Structures)	ÖVB 2
C3.2	Wireless Power Transmission Technologies and Application	CCB Bergen
C4.2	Propulsion System (2)	ZARM 5
D1.2	Space Systems Architectures	CCB London
D2.2	Launch Services, Missions, Operations, and Facilities	CCB Lloydsaal
D4.1	Innovative Concepts and Technologies	Bremen 1
E1.3	On Track - Undergraduate Space Education	CCB Scharoun
E2.1	Student Conference - Part 1	ÖVB 4
E3.1	International Cooperation for the benefits of developing countries and emerging space nations	CCB Franzius
E6.1	Entrepreneurship and Innovation: The Practitioners' Perspectives	CCB Roselius
E7.1	10th Nandasiri Jasentuliyana Keynote Lecture on Space Law and Young Scholars Session	Bremen 3

14:45 - 17:45 Technical Sessions

No.	Title	Room
A1.3	Medical Care for Humans in Space	CCB Danzig
A3.2B	Moon Exploration – Part 2	CCB Kaisen
A4.1	SETI 1: SETI Science and Technology	ÖVB 3
A6.4	Mitigation and Standards : status, lessons learnt and future with smallsats and constellations	ZARM 1
B1.3	Earth Observation Sensors and Technology	ZARM 3
B2.8-GTS.3	Space Communications and Navigation Global Technical Session	ÖVB 4
B3.3	Utilization & Exploitation of Human Spaceflight Systems	ZARM 4
B4.3	Small Satellite Operations	ZARM 2
C1.3	Attitude Dynamics (1)	CCB Borgward
C2.3	Space Structures - Dynamics and Microdynamics	ÖVB 2
C4.9	Hypersonic Air-breathing and Combined Cycle Propulsion	ZARM 5
D1.3	Technologies to Enable Space Systems	CCB London
D2.7	Small Launchers: Concepts and Operations (Part I)	CCB Lloydsaal
D3.2	Systems and Infrastructures to Implement Future Building Blocks in Space Exploration and Development	Bremen 1
D5.1	Quality and safety, a challenge for traditional and new space	Bremen 2
E1.4	In Orbit - Postgraduate Space Education	CCB Scharoun
E3.2	Ways ahead in Space Exploration	CCB Franzius
E4.1	Memoirs & Organizational Histories	CCB Roselius
E5.1	Space Architecture: Habitats, Habitability, and Bases	CCB Bergen
E7.2	Financing space: Procurement, competition and regulatory approach	Bremen 3

Wednesday 3 October 2018

09:45 - 12:45 Technical Sessions

No.	Title	Room
A1.4	Medicine in Space and Extreme Environments	CCB Danzig
A3.3A	Mars Exploration – missions current and future	CCB Kaisen
A5.2	Human Exploration of Mars	ZARM 3
A6.3	Impact-Induced Mission Effects and Risk Assessments	ZARM 1
A7.2	Science Goals and Drivers for Future Exoplanet, Space Astronomy, Physics, and Outer Solar System Science Missions	CCB Roselius
B2.3	Mobile Satellite Communications and Navigation Technology	ÖVB 3
B3.4-B6.4	Flight & Ground Operations of HSF Systems (A Joint Session of the Human Spaceflight and Space Operations Symposia)	ZARM 4
B4.4	Small Earth Observation Missions	ZARM 2
C1.4	Attitude Dynamics (2)	CCB Borgward
C2.4	Advanced Materials and Structures for High Temperature Applications	ÖVB 2
C4.3	Propulsion Technology (1)	ZARM 5
D2.3	Upper Stages, Space Transfer, Entry and Landing Systems	CCB Lloydsaal
D4.2	Contribution of Space Activities to Solving Global Societal Issues	Bremen 1
D5.2	Knowledge management for space activities in the digital era	Bremen 2
D6.1	Commercial Spaceflight Safety and Emerging Issues	ÖVB 4
E1.8	Hands-on Space Education and Outreach	CCB Scharoun
E2.2	Student Conference - Part 2	CCB London
E3.3	Space economy – Stimulating measureable economic activities through space policies and budgets	CCB Franzius
E5.3	Contemporary Arts Practice and Outer Space: A Multi-Disciplinary Approach	CCB Bergen
E7.3	Integrated space applications, EO telecoms navigation	Bremen 3

14:45 - 17:45 Technical Sessions

No.	Title	Room
A1.5	Radiation Fields, Effects and Risks in Human Space Missions	CCB Danzig
A2.3	Microgravity Experiments from Sub-Orbital to Orbital Platforms	Bremen 2
A3.3B	Mars Exploration – Science, Instruments and Technologies	CCB Kaisen
A5.1	Human Exploration of the Moon and Cislunar Space	ZARM 3
A6.9	Orbit Determination and Propagation	ZARM 1
B2.4	Advanced Satellite Services	ÖVB 3
B3.9-GTS.2	Human Spaceflight Global Technical Session	ÖVB 4
B4.5	Access to Space for Small Satellite Missions	ZARM 2
C1.5	Guidance, Navigation & Control (1)	CCB Borgward
C2.5	Smart Materials and Adaptive Structures	ÖVB 2
C3.3	Advanced Space Power Technologies	ZARM 4
C4.4	Electric Propulsion	ZARM 5
D2.4	Future Space Transportation Systems	CCB Lloydsaal
D3.3	Novel Concepts and Technologies to Enable Future Building Blocks in Space Exploration and Development	Bremen 1
E1.5	Enabling the Future - Developing the Space Workforce	CCB Scharoun
E2.4	Educational Pico and Nano Satellites	CCB London
E3.4	Assuring a Safe, Secure and Sustainable Environment for Space Activities	CCB Franzius
E5.2	Is Space R&D Truly Fostering A Better World For Our Future?	CCB Bergen
E6.2	Finance and Investment: The Practitioners' Perspectives	CCB Roselius
E7.4	Space law at Unispace +50: consequences and future perspectives	Bremen 3

Thursday 4 October 2018

09:45 - 12:45 Technical Sessions

No.	Title	Room
A1.6	Astrobiology and Exploration	CCB Danzig
A2.4	Science Results from Ground Based Research	Bremen 2
A3.4A	Small Bodies Missions and Technologies (Part 1)	CCB Kaisen
A6.5	Post Mission Disposal and Space Debris Removal (1)	ZARM 1
B1.5	Earth Observation Applications, Societal Challenges and Economic Benefits	ZARM 3
B2.5	Space-Based Navigation Systems and Services	ÖVB 3
B3.5	Astronaut Training, Accommodation, and Operations in Space	ZARM 4
B4.6A	Generic Technologies for Small/Micro Platforms	ZARM 2
B5.2	Integrated Applications End-to-End Solutions	Bremen 3
C1.6	Guidance, Navigation & Control (2)	CCB Borgward
C2.6	Space Environmental Effects and Spacecraft Protection	ÖVB 2
C4.5	Propulsion Technology (2)	ZARM 5
D1.4A	Space Systems Engineering - Methods, Processes and Tools (1)	CCB London
D2.5	Technologies for Future Space Transportation Systems	CCB Lloydsaal
D4.3	Conceptualizing Space Elevators and Tethered Satellites	Bremen 1
D6.3	Enabling safe commercial spaceflight: vehicles and spaceports	ÖVB 4
E1.7	New Worlds - Non-Traditional Space Education and Outreach	CCB Scharoun
E3.5-E7.6	33rd Joint IAA/IISL Round Table: Global Cooperation in Planetary Defence	CCB Franzius
E4.2	Scientific & Technical History	CCB Roselius
E5.4	Space Assets and Disaster Management	CCB Bergen

14:45 - 17:45 Technical Sessions

No.	Title	Room
A2.5	Facilities and Operations of Microgravity Experiments	Bremen 2
A3.5	Solar System Exploration	CCB Kaisen
A6.10-C1.7	Orbital Safety and Optimal Operations in an Increasingly Congested Environment (Joint Astrodynamics/Space Debris Session)	CCB Borgward
A6.6	Post Mission Disposal and Space Debris Removal (2)	ZARM 1
A7.3	Technology Needs for Future Missions, Systems, and Instruments	CCB Roselius
B1.6-GTS.1	Citizen Science in Global Earth Observation Systems	ÖVB 4

B2.6	Near-Earth and Interplanetary Communications	ÖVB 3
B3.6-A5.3	Human and Robotic Partnerships in Exploration - Joint session of the Human Spaceflight and Exploration Symposia	ZARM 4
B4.6B	Generic Technologies for Nano/Pico Platforms	ZARM 2
B5.3	Satellite Commercial Applications	Bremen 3
B6.1	Ground Operations - Systems and Solutions	CCB Franzius
C2.7	Space Vehicles – Mechanical/Thermal/Fluidic Systems	ÖVB 2
C3.4	Space Power System for Ambitious Missions	CCB Danzig
C4.6	New Missions Enabled by New Propulsion Technology and Systems	ZARM 5
D1.4B	Space Systems Engineering - Methods, Processes and Tools (2)	CCB London
D2.6	Future Space Transportation Systems Verification and In-Flight Experimentation	CCB Lloydsaal
D3.4	Space Technology and System Management Practices and Tools	Bremen 1
D5.3	Prediction, Testing, Measurement and Effects of space environment on space missions	ZARM 3
E1.9	Space Culture – Public Engagement in Space through Culture	CCB Scharoun
E5.5	Space Societies, Professional Associations and Museums	CCB Bergen

Friday 5 October 2018

09:45 - 12:45 Technical Sessions

No.	Title	Room
A1.7	Life Support, habitats and EVA Systems	CCB Danzig
A2.6	Life and Microgravity Sciences on board ISS and beyond (Part I)	Bremen 2
A3.2C	Moon Exploration – Part 3	CCB Kaisen
A6.7	Operations in Space Debris Environment, Situational Awareness	ZARM 1
B1.4	Earth Observation Data Management Systems	ZARM 3
B2.7	Advanced Technologies for Space Communications and Navigation	ÖVB 3
B3.7	Advanced Systems, Technologies, and Innovations for Human Spaceflight	ZARM 4
B4.8	Small Spacecraft for Deep-Space Exploration	ZARM 2
B6.2	New Space Operations Concepts and Advanced Systems	CCB Bergen
C1.8	Mission Design, Operations & Optimization (1)	CCB Borgward
C2.8	Specialised Technologies, Including Nanotechnology	ÖVB 2
C4.7-C3.5	Joint Session on Advanced and Nuclear Power and Propulsion Systems	ZARM 5
D1.5	Lessons Learned in Space Systems: Achievements, Challenges, Best Practices, Standards.	CCB London
D2.8-A5.4	Space Transportation Solutions for Deep Space Missions	CCB Lloydsaal
D4.4	Strategies for Rapid Implementation of Interstellar Missions: Precursors and Beyond	Bremen 1
E1.1	Ignition - Primary Space Education	CCB Scharoun
E3.6	Strategic Risk Management for successful space & defence programmes	CCB Franzius
E6.3	Innovation: The Academics' Perspectives	CCB Roselius
E7.5	The relationship between space law and cyberlaw, and other recent developments in space law	Bremen 3
E8.1	Multilingual Astronautical Terminology	CCB Herschel

13:30 - 16:30 Technical Sessions

No.	Title	Room
A1.8	Biology in Space	CCB Danzig
A2.7	Life and Microgravity Sciences on board ISS and beyond (Part II)	Bremen 2
A3.4B	Small Bodies Missions and Technologies (Part 2)	CCB Kaisen
A4.2	SETI 2: SETI and Society	ÖVB 3
A6.8	Policy, Legal, Institutional and Economic Aspects of Space Debris Detection, Mitigation and Removal (Joint Session with IAF Space Security Committee)	ZARM 1
B4.7	Highly Integrated Distributed Systems	ZARM 2
B4.9-GTS.5	Small Satellite Missions Global Technical Session	ÖVB 4
C1.9	Mission Design, Operations & Optimization (2)	CCB Borgward
C2.9	Advancements in Materials Applications and Rapid Prototyping	ÖVB 2
C4.10	Propulsion Technology (3)	Bremen 3
C4.8-B4.5A	Joint Session between IAA and IAF for Small Satellite Propulsion Systems	ZARM 5
D1.6	Cooperative and Robotic Space Systems	CCB London
D2.9-D6.2	Safe Transportation Systems for Sustainable Commercial Human Spaceflight / Small Launchers: Concepts and Operations (Part II)	CCB Lloydsaal
D4.5	Space Resources: Technologies, Systems, Missions and Policies	Bremen 1
D5.4	Cyber-security threats to space missions and countermeasures to address them	ZARM 3
E1.2	Lift Off - Secondary Space Education	CCB Scharoun
E4.3A	Germany's Contribution to Astronautics Post WWII	CCB Roselius
E4.3B	"Can you believe they put a man on the moon?"	CCB Roselius
E7.7-B3.8	Legal framework for collaborative space activities - New ways of launching (micro-launching) and large constellation microsats (Joint IAF/IISL session)	ZARM 4

4 Keynote Speakers

Keynotes

Monday 1 October

B1.	IAF EARTH OBSERVATION	Date	TIme	Room
	Session: 1 – International Cooperation in Earth Observation Missions	2018-10-01	15:00	ZARM 3

Astrid-Christina Koch
Government Official – European Earth Observation Program – Copernicus,
European Commission,
Belgium

KEYNOTE: 2018 Activities of the International Committee on Earth Observation Satellites (CEOS)

Abstract:
As the 2018 CEOS Chair, the European Commission will provide an overview of the ongoing activities representing the entire CEOS organization. Its aim is to deepen awareness of and support for its Earth observation missions, data, and activities, their global relevance and benefits.

In 2018 CEOS has started the process for launching a global greenhouse gas monitoring capacity using an ensemble of independent, observation-based atmospheric data. This capacity is needed to complement the bottom up efforts to support the implementation of the Paris Agreement for mitigation and adaptation.CEOS is undertaking dedicated preparatory work in a coordinated international context, to provide cumulative added value to the specific programmatic activities of their member agencies. Concerted efforts have already begun in the context of 2018 during the European Commission's Chairmanship of CEOS.

They include: The finalisation of the definition of an architecture of space component elements to address the requirements of a GHG monitoring system, the documentation of best practices on the relationships between individual Space Agencies and their counterparts working on the modelling aspects, the inventories and in situ data provision, as well as, the further consolidation of partnerships and collaborations between the relevant international entities.

Biography:
Astrid is working as the International cooperation officer for the Copernicus programme in the European Commission in Brussels. She is participating in this session in her role as European Commission coordinator of the CEOS Chair team 2018. She represents the Copernicus programme at multilateral fora (e.g. GEO. CEOS) and is working with international partners worldwide. In 2018 Copernicus cooperation arrangements were signed with India, Chile, Brazil, Colombia, Ukraine and Serbia.Before accepting the current position she worked as a Science Diplomat at the EU Delegation to the United States and as a science offcier for the European Reseach and Innovation Programme in the European Commission. Before joining the European Commission she was employed at the German Ministry of Finance to supervise the five Customs Laboratories.She holds a Ph.D. in Natural Sciences from Kiel University/Germany and worked as a Post-doc at the University of Colorado in Boulder.

C3.	IAF SPACE POWER	Date	TIme	Room
	Session: 1 – Solar Power Satellite	2018-10-01	15:00	CCB Bergen

John C. Mankins
President,
ARTEMIS Innovation Management Solutions, LLC,
United States

KEYNOTE: Fifty Years of Space Solar

Abstract:
Increased availability of affordable energy has never been more important to economic growth. Space Solar Power (SSP) – delivering energy for Earth from space – is one of the fundamental options for meeting this economic challenge. Every few years the international space solar power (SSP) community has organized a symposium on the topic, including SPS 2004 in Spain; SPS 2009 in Canada, SPS 2014 in Japan, and at the end of May 2018, SPS 2018 in the USA. 2018 is the 50th Anniversary of Dr. Peter Glaser's invention of, and first paper on the topic of the solar power satellite (SPS). This paper presents a retrospective of the past fifty years, and a prospective view of the next fifty years of SSP.

Biography:
John C. Mankins is President of Artemis Innovation Management Solutions LLC and of Mankins Space Technology, Inc., Vice President of the Moon Village Association, and serves on the National Space Society and SPACE Canada Boards. During his career at NASA HQ and JPL he held numerous positions, including Chief Technologist for Human Exploration and Development of Space, where he received the NASA Exceptional Technology Achievement Medal. He holds a B.S. and an M.S. in Physics, and an MBA. Mankins is known for the first detailed definitions of the TRLs, and as leading expert in the field of "Space Solar Power".

C4.	IAF SPACE PROPULSION	Date	TIme	Room
	Session: 1 – Propulsion System (1)	2018-10-01	15:00	ZARM 5

Gerald Hagemann
Head of Engineering Liquid Propulsion,
ArianeGroup,
Germany

KEYNOTE: The European Way for Liquid Propulsion – Hydrogen / Methane Family Concept

Abstract:
European Competence in Liquid Propulsion builds upon Hydrogen propellant, since approx. 40 years with the Ariane launcher family.

Ariane 6 builds upon this heritage

With this core competence, the Hydrogen knowledge can be easily expanded towards Methane. Prometheus is a prominent engine demonstrator programme that builds upon this.

ArianeGroup expands this commonality further towards an engine family in the 1 – 10 – 100 tons thrust classes, by strictly focusing on "design to manufacturing" or "design to produce". Following this, same design and manufacturing processes are considered as standard for all engine thrust classes. As result, "economy of scales" effect on recurring costs can be realized without strictly following "the one single" engine concept.

DLR & ArianeGroup have demonstrated through LOX / Methane tests at 40 tons thrust level the scaling from Hydrogen to Methane. Elements on this will be shortly presented as well as the 100 tons Prometheus test bench.

Biography:
Dayong Zheng, an experienced expert in aerospace prolusion, was born on August, 1978.
Mr. Zheng earned a master degree of aeronautics propulsion from Nanjing University of Aeronautics and Astronautics in 2005 and then began his career in Beijing Aerospace Propulsion Institute (BAPI). He began his duty as a system designer of Chinese first high-thrust cryogenic engine, YF-77 in 2005. In 2015, Mr. Zheng wsa assigned as the deputy director of the Main Propulsion Division and lead a professional team to advance the missions and goals of China's space program. During his career in BAPI, Mr. Zheng has also commit himself to development of clearner, reusable and low cost space propulsion technology. Because of his earnest support and permanent endeavor to the project, one 60-ton LOX/Methane reusable engine has been successfully developed and demonstrated over 2170 seconds and 17 mission cycles in 2016.

E1.	IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM	Date	TIme	Room
	Session: 6 – Calling Planet Earth – Space Outreach to the General Public	2018-10-01	15:00	CCB Scharoun

David B. Spencer
Professor, Recipient of the Malina Medal 2018,
The Pennsylvania State University,
United States

KEYNOTE: Using Design Competition Projects for a Spacecraft Design Capstone

Abstract:
In the search for realistic design projects for a spacecraft design capstone course, an excellent source of project ideas comes from various design competitions. At Penn State University, we have used this source of design projects successfully for nearly two decades in our senior Spacecraft Design courses. In recent years, we have used three sources of these projects: The American Institute of Aeronautics and Astronautics Space Design and Space Transportation competitions, the NASA-sponsored RASC-AL (Revolutionary Aerospace Systems Concepts – Academic Linkage) projects and the Mars Society's design competitions provide detailed ideas for realistic projects. Because of the well-conceived projects, the students appreciate the realism of the projects, which inspires them to perform at a high level. Additionally, many students use this as an entry point into the world of systems engineering, whether it is designing space missions to Pluto or designing a drone aircraft to deliver packages.

Biography:
Dr. David Spencer is a Professor in the Department of Aerospace Engineering at The Pennsylvania State University. His research areas include: spacecraft dynamics and controls, trajectory optimization, space systems engineering, and theoretical and applied astrodynamics. He is a Fellow of the American Astronautical Society, an Associate Fellow of the AIAA, and a Corresponding Member of the IAA. Dr. Spencer received a B.S. in Mechanical Engineering from the University of Kentucky, an M.S. in Aeronautics and Astronautics from Purdue University, an M.B.A. from Penn State, and a Ph.D. in Aerospace Engineering Sciences from the University of Colorado at Boulder.

Tuesday 2 October

A2.	IAF MICROGRAVITY SCIENCES AND PROCESSES	Date	TIme	Room
	Session: 2 – Fluid and Materials Sciences	2018-10-02	09:45	Bremen 2

Valentina Shevtsova
Head of the Research Group,
Université Libre de Bruxelles,
Belgium

KEYNOTE: Fluid Science Experiments Conducted on the ISS

Abstract:
In a liquid mixture composed of several components, a temperature gradient leads to the heat and mass transport, i.e., thermodiffusion or Soret effect. With the aim to establish reliable and guaranteed convection-free reference data on thermodiffusion, ESA has created instrument SODI (selectable optical diagnostics instrument) which is placed on the ISS. While examining a binary solution, the IVIDIL, the first experiment inside the SODI, confirmed that (a) the daily onboard environment of the ISS does not perturb diffusion-controlled experiments and (b) the results obtained onboard the ISS are reliable. Currently, DCMIX (Diffusion Coefficients in MIXtures) project is focused on the investigation of the ternary mixtures. Another topic of the research on the ISS is related to Marangoni convection. The space experiment JEREMI (Japanese European Space Research Experiment on Marangoni Instabilities) is aimed to the study of the threshold of hydrothermal instabilities in two-phase systems in cylindrical geometry.

Biography:
Dr. Valentina Shevtsova is a head of the research group at Microgravity Research Centre of Free Brussels University (ULB), Belgium. Her research interests cover a large number of topics including multiphase flow and transport with diffusion and Soret effect, the physics and mechanics of fluid interfaces, vibrational phenomena in fluids. Her work has produced over 170 refereed papers and she is a regular speaker at international meetings. She was/is involved as the principal investigator in 5 space experiments on the International Space Station and she conducted 6 parabolic flight campaigns. She is the Editor-in-Chief of Microgravity Science and Technology journal.

C3.	IAF SPACE POWER	Date	TIme	Room
	Session: 2 – Wireless Power Transmission Technologies and Application	2018-10-02	09:45	CCB Bergen

Guy Pignolet
Chairman,
Science Sainte Rose,
La Reunion

KEYNOTE: Wireless Power Transportation World Research Center – Purpose and Operation

Abstract:
Prof. A.P.J. Abdul Kalam, born in India in a Tamil family, opened his mind to an extended world while in high school when he discovered that a hard solid table was also a void filled with sparse atoms and electrons spinning at equivalent speeds of thousands of kilometers per second. As an engineer, during the 60's and 70's he was a leading figure in India's access to Space. Later he developed a missile capability for the defense of India, and eventually, from 2002 till 2007 he was the President of the Republic of India. An outspoken proponent of Space Solar Systems, Abdul Kalam received the Vernher von Braun Prize in 2013, and he proposed nations to unite for the building of Space Power. He concluded by saying we had the capability to make the world livable for all, peaceful and prosperous and asked "What are we waiting for?".

Biography:
Guy Pignolet is a senior space educator currently working for the development of space activities in his home region, the French/ European island of La Reunion. After a carrier in oil field geophysical exploration, he entered space activities at the age of 36 with the French Agency Cnes where he was in charge of developing a future studies department. Guy Pignolet has been actively involved with the International Astronautical Federation where he chaired the Educational Committee during the 90's before joining the Space Power Committee. Recently he made a French translation of Prof. Abdul Kalam's famous autobiography "Wings of Fire".

C4.	IAF SPACE PROPULSION	Date	TIme	Room
	Session: 2 – Propulsion System (2)	2018-10-02	09:45	ZARM 5

Jean-François Guery
Solid Propulsion Engineering,
ArianeGroup,
France

KEYNOTE: Recent Developments in Solid Propulsion

Abstract:
Ten years after the international paper "Solid propulsion for space applications: An updated roadmap" written by contributions from Europe, USA and Japan, presented during IAC 2007 in Hyderabad, and published in Acta Astronautica, this keynote will focus on the recent developments in solid propulsion, the evolution of the market of space launchers, and the associated new challenges.

Biography:
Jean-Francois Guery has spent 28 years in solid propulsion, from research studies on solid propellants and solid rocket motors design, addressing in the 90's topics like combustion instabilities and thrust oscillations, up to design model now used on Ariane 6 (AIAA 2008 SRTC Best Paper Award). He was Program Director, then CTO of Europropulsion from 2013 to 2018, managing the production of Ariane 5 and Vega P80 solid rocket motors, and the development of the P120C for Ariane 6 and Vega C. He is now vice-director of Solid Propulsion Engineering in ArianeGroup. Jean-Francois Guery is also an AIAA Associate Fellow.

C4.	IAF SPACE PROPULSION	Date	TIme	Room
	Session: 9 – Hypersonic Air-breathing and Combined Cycle Propulsion	2018-10-02	14:45	ZARM 5

Klaus Hannemann
Head of Spacecraft Department,
DLR Göttingen,
German Aerospace Center (DLR)
Germany

KEYNOTE: Advance of Scramjet Operating Mode Comprehension based on Shock Tunnel Experiments and Numerical Modelling

Abstract:
At DLR, hydrogen fueled integrated scramjet configurations were in the focus of combined experimental and numerical research activities. The ground based testing was conducted in the High Enthalpy Shock Tunnel Göttingen. Among the considered configurations is the Australian HyShot II flight test vehicle. It was considered to be well suited for basic combustor investigations and numerical tool validation purposes. Benchmark data was compiled related to combustor flows. The latter focused on the response of the HyShot II combustor to equivalence ratios close to the critical value at which the onset of thermal choking occurs. The detailed analysis of the developing shock train and its unexpected behaviour revealed new insight in the combustor flow generated by localized thermal choking. A small scale flight experiment was designed in the framework of the LAPCAT II project. The complete scramjet flow path was subsequently tested and the numerically predicted positive aero-propulsive balance could be demonstrated by utilizing the free flight force measurement technique based on optical tracking.

Biography:
K. Hannemann studied mechanical engineering at the University of Karlsruhe, Germany. He received his diploma in 1984 and his doctoral degree in 1987. Since 1988 he works on experimental and numerical aerothermodynamics for space vehicles and space propulsion at the German Aerospace Center in Göttingen. In 2002 he became Head of the Spacecraft Department. Since 2010 he lectures at the Justus Liebig Universität Gießen and in 2013 he was appointed Professor for Spacecraft. K. Hannemann is member of a number of international committees, serves on the Editorial Board of the Shock Wave Journal and is Field Editor Aerothermodynamics for the CEAS Space Journal.

D2.	IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS	Date	TIme	Room
	**Session: 7 –** Small Launchers: Concepts and Operations (Part I)	2018-10-02	14:45	CCB Lloydsaal

Ariane Cornell
Head of Marketing Astronaut flight and New Glenn Commercial Sales Director,
Blue Origin,
United States

KEYNOTE: Experience from Suborbital Reusable Launches

Abstract:
Blue Origin has unique experiance in developing , launching and refurbishing a fist stage / suborbital vehicle. The stunning success of the New shepard and the applicability to not only large launchers but also micro launchers.

Biography:
At Blue Origin, Ariane Cornell is the Director for New Glenn Commercial Sales – Americas. She also is the Head of Astronaut Strategy & Sales. Ariane was formerly based in Vienna, Austria as the Executive Director of the Space Generation Advisory Council in Support of the United Nations Programme on Space Applications (SGAC). She headed SGAC's delegations to international conferences and the United Nations, as well as ran the organization's operations, business development, strategy, and policy output. Ariane supports the international aerospace community in other capacities and organizations. She currently is on the board of the Society of Satellite Professionals International (SSPI) and has served on the board of Women in Aerospace – Europe. Previously, Ariane worked in international management consulting, first with Accenture based in San Francisco as an analyst and then with Booz Allen Hamilton in Washington, DC as a senior consultant. Ariane earned an MBA from Harvard University and a Bachelor of Science degree with honors from Stanford University.

E7.	61st IISL COLLOQUIUM ON THE LAW OF OUTER SPACE	Date	TIme	Room
	**1 –** 10th Nandasiri Jasentuliyana Keynote Lecture on Space Law and Young Scholars Session	2018-10-02	14:45	Bremen 3

Marco Ferrazzani
Head of Legal Services Department,
European Space Agency (ESA),
France

KEYNOTE: Space Law and International Organisations

Abstract:
In the first part of this session, Marco Ferrazzani will deliver the keynote lecture "Space law and international organisations". The second part of this session will be dedicated to the space lawyers of the future and young scholars (under 35 years old) who are invited to present a paper on a relevant topic of space law.

Biography:

Marco Ferrazzani is the Legal Counsel and Head of the Legal Services department at the European Space Agency, based at its headquarters in Paris, France. In this position, he provides a full spectrum of legal advice and guidance on the legal and programmatic aspects of ESA's programmes and policies.

As ESA's Legal Counsel, Dr. Ferrazzani is advisor to the ESA Director General and to the ESA Council for all institutional and legal matters, including the interpretation of the ESA Convention and all relevant legal instruments. In addition to managing a team of international legal officers in his role as Head of the Legal Services department at ESA, he advises ESA's organs and its Member States on a wide variety of legal matters.

Wednesday 3 October

B4.	25th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS	Date	TIme	Room
	**Session: 5** – Access to Space for Small Satellite Missions	2018-10-03	14:45	ZARM 2

Peter Beck
Founder & CEO,
Rocket Lab,
United States

KEYNOTE: Rocket Lab: Liberating the Small Satellite Market

Abstract:
With the successful launch of the Rocket Lab Electron launch vehicle and the completion of the "Still Testing" mission, which carried three customer spacecraft to their desired orbits in January 2018, Rocket Lab is well-positioned to begin delivering on the goal of providing unprecedented access to space for small satellite payloads. Upon entering full commercial operations, Rocket Lab seeks to address major barriers currently associated with small satellites, including long lead times to launch, reaching preferred orbits, and cost. The Electron launch vehicle is a dedicated small launcher designed to liberate the small satellite market with dedicated, high-frequency launch opportunities. Electron is a two-stage vehicle capable of delivering payloads of 150 kg to a 500 km sun-synchronous orbit, the target range for the small satellite market. Vertical integration combined with streamlined processes reduce the traditional lead time to put a satellite on orbit from years to months or even weeks. With the world's first fully commercial launch range in Mahia, New Zealand, Rocket Lab can accommodate an increased launch cadence as well as reach orbital inclinations from sun-synchronous through to 39 degrees from a single site. Rocket Lab's Electron vehicle is ready to open space up to the burgeoning small satellite market.

Biography:
Peter Beck is the founder and CEO of Rocket Lab, an orbital launch company revolutionizing access to orbit for small satellites. Peter leads the US and New Zealand based team behind the Electron orbital launch vehicle. In addition to developing the world's first fully carbon-composite rocket, powered by 3D printed, electric turbopump-fed engines, Peter has played an instrumental role in establishing the international treaties and legislation that enabled orbital launch capability from Rocket Lab's Launch Complex 1 on New Zealand's Mahia Peninsula, the first and only private orbital launch range on the globe.

C1.	IAF ASTRODYNAMICS	Date	TIme	Room
	**Session: 5** – Guidance, Navigation & Control (1)	2018-10-03	14:45	CCB Borgward

Eberhard Gill
Professor, Chair of Space Systems Engineering,
Delft University of Technology,
The Netherlands

KEYNOTE: How to Sense Gravity?

Abstract:
What has Newton's apple to do with a hydrogen atom falling into a black hole? What does a rotating massive body do to the space-time surrounding it? How can you really measure the tiny distortions of space-time and separate them from fictitious effects arising from rigorous application of fundamental theory? What are present-days satellite missions contributing to characterize the Earth's gravity field and which future challenges and developments does satellite technology hold to sense gravity?

The Breakwell lecture will try to answer these questions based on the author's fascination and examination with the phenomenon of gravity and the ways how to sense, measure and characterize it.

Biography:
Prof. Eberhard Gill obtained his PhD in theoretical astrophysics from the Eberhard-Karls-University in Germany. He was a researcher at the DLR from 1989 to 2006 in the field of precise orbit determination, autonomous navigation and formation flying. Dr. Gill was Co-Investigator and Principal Investigator on several international missions, including Rosetta. Since 2007, he holds the Chair of Space Systems Engineering at the Technical University of Delft. Dr. Gill has authored or co-authored more than 250 journal articles and conference papers and four text books. He holds three patents on GNSS applications, attitude control systems and Formation Flying. In 2014, he was appointed the full member of the IAA.

C2.	IAF MATERIALS AND STRUCTURES	Date	TIme	Room

Session: 4 – Advanced Materials and Structures for High Temperature Applications | 2018-10-03 | 09:45 | ÖVB 2

Gerben Sinnema
Structural Engineer,
European Space Agency (ESA-ESTEC),
The Netherlands

KEYNOTE: Paolo Santini Memorial Lecture: Safety of Spaceflight Structures – The Application of Fracture and Damage Control

Abstract:
Since Apollo it has been necessary to ensure the safety of spaceflight structures by fracture and damage tolerance methods. Fracture and damage control cover a wide range of structural and materials engineering disciplines. This paper will present a brief overview of the history, the current state of art, and new developments in implementing fracture and damage control to assure spaceflight structural integrity.

Biography:
Gerben Sinnema is the focal point for fracture control in the Structure, Mechanisms & Materials Division of the European Space Agency at ESTEC. He obtained his mechanical engineering degree in applied mechanics in 1988 from University of Twente in The Netherlands. He started his nearly 30 year long career in space working on launcher structures at Fokker Space from 1990-1999, before joining ESA. His current responsibilities include implementation and certification of fracture control on structures developed by ESA for manned and unmanned projects. This includes contribution to the tools, methodologies and requirements for fracture control, fracture mechanics and fatigue.

E3.	31st IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS	Date	TIme	Room

Session: 3 – Space economy – Stimulating measureable economic activities through space policies and budgets | 2018-10-03 | 09:45 | CCB Franzius

Eric Morel
Director of Industry, Procurement and Legal Services,
European Space Agency (ESA),
France

KEYNOTE: Reflections on the Economic Impact of Profit Policies by Public Procurement Authorities in Space and Defence Programmes

Abstract:
Technological advancements from different sectors feed into the space sector. Innovative and lower cost applications of space are emerging together with new business models, making investment in space more attractive and lucrative. Consequently, there has been a rapid growth of private and non-space commercial firms taking on a greater proportion of space-based activity during the last years, boosting as such the economic impact of space activities. In this context, public procurement authorities may need to evolve to be able to partner effectively with new (and old) space Industry players to consider their return on investment expectations whilst preserving the best value for public expenditure and maintaining an environment for economic growth.

Biography:
Eric Morel de Westgaver is currently the Director of Industry, Procurement and Legal Services (D/IPL) of the European Space Agency (ESA) as well as the Head of ESA HQ Paris. Since joining ESA in 1987, Mr. Morel de Westgaver has served in several functions at the agency, including as Head of the Procurement Department in the Directorate of Resources Management and Industrial Matters; as Director of Procurement, Financial Operations and Legal Affairs; and as Associate Director for Industrial Matters, to which he was nominated by the Director General. He graduated in Economics from the Catholic University of Louvain, Belgium.

Friday 5 October

B4.	25th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS	Date	TIme	Room

Session: 9-GTS.5 – Small Satellite Missions Global Technical Session | 2018-10-05 | 13:30 | ÖVB 4

Darren McKnight
Technical Director,
Integrity Applications, Inc. (IAI),
United States

KEYNOTE: Practical Debris Mitigation Manual for Developers of Microsatellites and Smaller

Abstract:
Orbital debris mitigation is becoming increasingly important as the popularity of using small satellites by governments, industry and academia is increasing. Improvements in technology and reducing the cost of access to space have made it easier to deploy space missions. Small satellite systems can provide significant benefit to STEM research, providing governments with infrastructure and information, and make some new applications financially viable for commercial companies. However the Earth orbital environment is a limited resource, and requires coordination and careful understanding in small satellite implementation in order to ensure long term sustainability of these activities.

The IAA has formulated a study group to bring together a range of advice and practical steps that can be taken to help new and more experienced developers of micro, nano and picosatellites (and smaller) understand their obligations, international guidelines, standards, and national laws related to ensuing they sustainably develop their small satellite missions. The group includes key experts and interest groups, and the outputs will be captured in a manual which will be made openly available."

Biography:
Dr. Darren McKnight is Technical Director for Integrity Applications, Inc. (IAI) based in Chantilly, Virginia. He leads teams to develop solutions across widely disparate domains: space systems, predictive awareness for infectious disease outbreaks, workforce productivity, and orbital debris. Recently, he has focused his research on monitoring and characterizing the risk from catastrosphic debris-generating events due to collisions between massive abandoned rocket bodies and defunct payloads to catalyze debris remediation activities such as active debris removal and just-in-time collision avoidance. He has also served as a Chief Technology Officer, Physics professor, and test engineer during his career.

C4.	IAF SPACE PROPULSION	Date	TIme	Room

Session: 8-B4.5 – Joint Session between IAA and IAF for Small Satellite Propulsion Systems | 2018-10-05 | 13:30 | ZARM 5

Paolo Lozano
Director, Space Propulsion Laboratory,
Massachusetts Institute of Technology (MIT),
United States

KEYNOTE: Progress and challenges of small satellite propulsion systems

Abstract:
Space science and technology is clearly trending towards systems based on the use of small spacecraft, in part because of their reduced costs and development times, but also because of the benefits these systems could provide in terms of their potential for multispectral, persistent and robust data collection. Propulsion is a critical subsystem that is required to achieve the maximum capability of small vehicles, but it is also one of the most challenging to develop and implement, for technical and programmatic reasons. In this talk we present an overview of efforts to provide propulsion to small spacecraft, spanning different technologies and their readiness levels. We focus on electric propulsion as an option for efficient mobility that could enable applications ranging from main propulsion for scientific missions to the deployment of massive small satellite constellations.

Biography:
Paulo C. Lozano is the M. Alemán-Velasco Professor of Aeronautics and Astronautics at MIT, Director of the Space Propulsion Laboratory and the MIT-Mexico Program. His main interests are in plasma physics, space propulsion, ion beam physics, small satellites and nanotechnology. He received a Young Investigator Program Award from the US Air Force for his work on micro-propulsion and the "Future Mind" award from Quo Science Magazine and the Discovery Channel. Dr. Lozano is an Associate Fellow of the American Institute of Aeronautics and Astronautics. He served on the Asteroid Mitigation and NASA Technology Roadmaps panels of the National Research Council.

C4.	IAF SPACE PROPULSION	Date	TIme	Room
	Session: 10 – Propulsion Technology (3)	2018-10-05	13:30	Bremen 3

Ulrich Gotzig
Head of Product Support,
ArianeGroup,
Germany

KEYNOTE: Green Solutions for Space Propulsion

Abstract:
Chemical Hydrazine based systems dominate the market for satellite propulsion since several decades but this market is currently in a significant change process. Green, non-toxic propellants, the maturation of electric propulsion, upcoming mega-constellations, "new space", "clean space", exploration missions to moon and mars … all these new requirements foster and influence the adaptation of the current product portfolio but also give opportunities for new technologies to be developed. This paper gives an industry view about space propulsion in Europe with the focus on a changing market and trends for green solutions for the future.

Biography:
Education / Training:

- Graduated as Dipl. Ing. Aerospace Engineering Technical University of Stuttgart in 1990
- Expert for Orbital propulsion since 2005

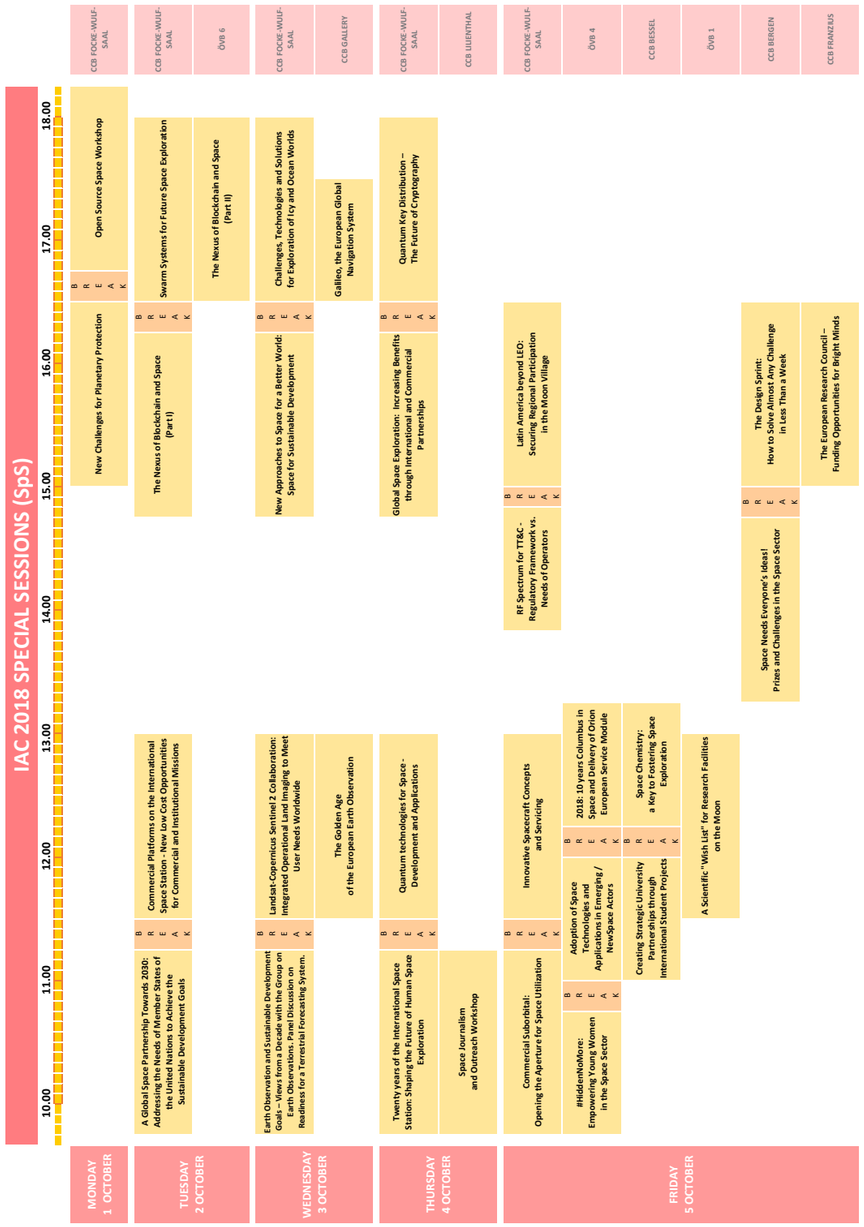
Position

- Joined MBB Lampoldshausen in 1990 as Test Engineer
- Since 2009 Lead Engineer for monopropellant and bipropellant thruster engineering and production
- Since 2012 Project Manager for Alternative Propellant R&D program within Ariane Group

Since 2017 Head of Product Support

5 Special Sessions

5.1 Special Sessions at a Glance



6.2 Special Sessions per Day

Special Sessions have a limited participant capacity. Seating is granted on a first-come, first-served basis. Participants are encouraged to arrive 10 minutes prior to the start time.

Monday 1 October 2018

15:00 - 16:30 New Challenges for Planetary Protection

Location: CCB Focke-Wulf-Saal
Format: Panel Discussion

Organizers:

David H. Smith
Senior Study Director,
Space Studies Board – National Academies of Sciences, Engineering, and Medicine,
United States

Mia A. Brown
Research Associate,
Space Studies Board – National Academies of Sciences, Engineering, and Medicine,
United States

New Challenges for Planetary Protection

This session provides a unique opportunity for members of the scientific community, emerging space powers, the private sector, and advocates for human space exploration to discuss critical questions in the development of future international planetary protection policies. Is the existing framework for planetary protection policy sufficient for including the interests of new actors? How should the space community organize to develop a new response to meet all of these needs and ambitions? What next steps need to occur if we are to create effective technical and legal planetary protection standards that serve as enablers of space exploration for everyone involved?

Facilitator:

James Green
Chief Scientist,
National Aeronautics and Space Administration (NASA),
United States

Speakers:

Athena Coustenis
Chair,
COSPAR Panel on Planetary Protection, Paris Observatory,
France

John D. Rummel
Senior Scientist,
SETI Institute,
United States

Omran Anwar Sharaf
Project Director, Emirates Mars Mission,
Mohammed Bin Rashid Space Centre (MBRSC),
United Arab Emirates

Eric Stallmer
President,
Commercial Spaceflight Federation,
United States

Kasthuri Venkateswaran
Senior Research Scientist,
NASA Jet Propulsion Laboratory (JPL),
United States

YANG Hong
Chief Designer,
China Academy of Space Technology (CAST),
China

16:45 - 18:15 Open Source Space Workshop

Location: CCB Focke-Wulf-Saal
Format: Workshop

Organizer:

Claas Ziemke
Research Engineer,
German Aerospace Center (DLR),
Germany

Open Source Space Workshop

Open source software is used virtually everywhere and open source hardware is getting more and more popular as well. Why not apply the philosophy of open source to space?

This session is addressing everyone who is interested in open-source or is even running an open-source space project. We will discuss relevant open-source projects and the advantages and disadvantages of the open-source approach. Also we will provide possibilities to network and build an open-source community

Speakers:

Pierros Papadeas
Co-Founder,
Libre-Space Foundation,
Greece

Artur Scholz
Member,
LibreCube Initiative,
Germany

Daniel Stefl
CEO,
Space Systems Czech,
Czech Republic

Tuesday 2 October 2018

09:45 - 11:15 A Global Space Partnership Towards 2030: Addressing the Needs of Member States of the United Nations to Achieve the Sustainable Development Goals

Location: CCB Focke-Wulf-Saal
Format: Panel Discussion

Organizers:

Jorge Del Rio Vera
Senior Programme Officer,
United Nations Office for Outer Space Affairs (UNOOSA),
Austria

Hui Du
Senior Expert,
United Nations Office for Outer Space Affairs (UNOOSA),
Austria

Shirish Ravan
Senior Programme Officer,
United Nations Office for Outer Space Affairs (UNOOSA),
Austria

A Global Space Partnership Towards 2030: Addressing the Needs of Member States of the United Nations to Achieve the Sustainable Development Goals

As adopted by UNISPACE+50, a "Space2030" agenda and implementation plan, with the goal to strengthen the contribution of space activities and space tools to the achievement of global agendas, will be provided to the General Assembly in 2020. A global partnership is needed to identify user needs and propose long-term space solutions. A high level panel will share their ideas and visions. Please come and join Jean-Pascal Le Franc, Director of Planning, International Relations & Quality of CNES, Simonetta Di Pippo, Director of UNOOSA and other high level speakers to explore more on the global space partnership towards 2030.

Facilitators:

Ayami Kojima
Expert,
United Nations Office for Outer Space Affairs (UNOOSA),
Austria

Aimin Niu
Scientific Affairs Officer,
United Nations Office for Outer Space Affairs (UNOOSA),
Austria

Speakers:

Vincenzo Aquaro
Chief for Public Institutions and Digital Government,
United Nations Department of Economic and Social Affairs (UNDESA),
United States

Simonetta Di Pippo
Director,
United Nations Office for Outer Space Affairs (UNOOSA),
Austria

John Njoroge Kimani
Lead Scientist / CEO,
Kenya Space Agency,
Kenya

Jean-Pascal Le Franc
Director of Planning, International Relations & Quality,
Centre National d'Études Spatiales (CNES),
France

LI Ming
Vice President,
China Academy of Space Technology (CAST),
China

11:30 - 13:00 Commercial Platforms on the International Space Station – New Low Cost Opportunities for Commercial and Institutional Missions

Location: CCB Focke-Wulf-Saal
Format: Panel Discussion

Organizer:

Christian Steimle
Bartolomeo Program Manager,
Airbus Defence and Space,
Germany

Commercial Platforms on the International Space Station – New Low Cost Opportunities for Commercial and Institutional Missions

Welcome to the growing low Earth orbit market place, welcome to the International Space Station! New commercial platforms are available on humankind's largest space structure, providing new opportunities and value for you and your space mission. Learn more about your new opportunities and join us for the session. We make space missions possible!

Facilitators:

Amy Hauser
Director Business Development Bartolomeo,
Airbus DS Space Systems, Inc.,
United States

Christian Steimle
Bartolomeo Program Manager,
Airbus Defence and Space,
Germany

Speakers:

Ludger Froebel
National Technical Authority (NTA), Strategic Partnerships,
ArianeGroup,
Germany

John Horack
Professor and Neil Armstrong Chair,
The Ohio State University,
United States

Oliver Juckenhoefel
Vice President, Head of On-Orbit Services and Space Exploration,
Airbus Defence and Space,
Germany

Jeffrey Manber
Chief Executive Officer,
NanoRacks LLC,
United States

Robert T. Richards
Vice President, Strategy and Business Development, Advanced Programs Division,
Orbital ATK, Inc.,
United States

Frank Salzgeber
Head of Technology Transfer Programme Office,
European Space Agency (ESA),
The Netherlands

Sam Scimemi
Director for International Space Station (ISS),
National Aeronautics and Space Administration (NASA),
United States

Ken Shields
Director of Operations & STEM Education,
Center for the Advancement of Science in Space,
United States

14:45 - 16:15 The Nexus of Blockchain and Space (Part I)

Location: CCB Focke-Wulf-Saal
Format: Panel Discussion

Organizer:

Timiebi Aganaba-Jeanty
Assistant Professor,
School for the Future of Innovation in Society,
Arizona State University,
United States

The Nexus of Blockchain and Space (Part I)

The World Economic Forum describes blockchain as one of the key technologies of the future. As a result, there is a proliferation of initiatives investigating the potential of blockchain in a variety of contexts beyond the well known bitcoin cryptocurrency application. The nexus of blockchain and space is an interesting and underexplored area. This panel seeks to introduce the IAC community to emerging projects in that nexus and some of the governance challenges that emerge.

Speakers:

Joe Landon
CFO,
Planetary Resources,
United States

George Anthony Long
Managing Member,
Legal Parallax, LLC,
United States

Julie Maupin
Head of Social Impact & Public Regulatory Affairs,
IOTA Foundation,
Germany

Dimitra Stefoudi
PhD Candidate,
University of Leiden,
The Netherlands

Pavlo Tanasyuk
Founder,
Spacebit and Blockverify
United Kingdom

16:30 - 18:00 The Nexus of Blockchain and Space (Part II)

Location: ÖVB 6
Format: Workshop

Organizer:

Timiebi Aganaba-Jeanty
Assistant Professor,
School for the Future of Innovation in Society,
Arizona State University,
United States

The Nexus of Blockchain and Space (Part II)

Following the Nexus BlockSpace (Part I) Open Panel Discussion, you may want to dive deeper into the Blockchaining Space project in an interactive workshop with the proponents of the Project during the Nexus Block Space (II) Special Session. A partnership between IOTA Foundation, Orbit Recycling and the GIZ Blockchain Lab, Blockchaining Space seeks to explore the core challenges of space access, traffic management, debris mitigation and the governance potential of Blockchain/DTLs. The Blockchaining Space concept is focused on understanding how DTLs could address the problems of the space sector, while getting inputs directly from space sector industry participants during this workshop.

16:30 - 18:00 Swarm Systems for Future Space Exploration

Location: CCB Focke-Wulf-Saal
Format: Workshop

Organizers:

Leon Alkalai
Manager, Office of Strategic Planning,
NASA Jet Propulsion Laboratory (JPL),
United States

Armin Dammann
Team Leader Mobile Radio Transmission,
German Aerospace Center (DLR),
Germany

Fred Hadaegh
Chief Technologist,
NASA Jet Propulsion Laboratory (JPL),
United States

Dmitriy Shutin
Team Leader Swarm Exploration,
German Aerospace Center (DLR),
Germany

Swarm Systems for Future Space Exploration

Future robotic in-situ space exploration is a precursor for human colonization of our solar system and search for life on other planets. In contrast to modern Curiosity or ExoMars rovers, future robotic platforms will likely consist of multiple units, forming swarms or teams to provide large spatial sensing aperture, increased efficiency, robustness, and autonomy. This special session is dedicated to the use of multi-agent approaches towards future space exploration, its advantages, challenges, and possible applications.

Facilitator:

Armin Dammann
Team Leader Mobile Radio Transmission,
German Aerospace Center (DLR),
Germany

Speakers:

Leon Alkalai
Manager, Office of Strategic Planning,
NASA Jet Propulsion Laboratory (JPL),
United States

Fred Hadaegh
Chief Technologist,
NASA Jet Propulsion Laboratory (JPL),
United States

Klaus Schilling
Professor and Chair for Robotics and Telematics,
University of Würzburg,
Germany

Dmitriy Shutin
Team Leader Swarm Exploration,
German Aerospace Center (DLR),
Germany

Detlef Wilde
Program Manager for Suborbital Missions,
Airbus Defence and Space,
Germany

Wednesday 3 October 2018

09:45 - 11:15 Earth Observation and Sustainable Development Goals – Views from a Decade with the Group on Earth Observations. Panel Discussion on Readiness for a Terrestrial Forecasting System

Location: CCB Focke-Wulf-Saal
Format: Panel Discussion

Organizers:

James Graf
Deputy Director for Earth Science and Technology,
NASA Jet Propulsion Laboratory (JPL),
United States

Barbara Ryan
Retired,
Group on Earth Observations (GEO),
United States

Earth Observation and Sustainable Development Goals – Views from a Decade with the Group on Earth Observations. Panel Discussion on Readiness for a Terrestrial Forecasting System

Enabled by broad, open data policies and practices for the U.S. Landsat Program, and the European suite of Sentinel satellites in the Copernicus Programme, tremendous advances have been made in technologies for global terrestrial observations – permitting analysis of global landscape change that was not possible, heretofore. This Expert Panel reflects how to achieve the United Nation's SDGs by concerted space activities and how to advance Earth observations to a terrestrial forecasting system.

Speakers:

Josef Aschbacher
Director of Earth Observation Programmes and Head of ESRIN,
European Space Agency (ESA),
Italy

Michael Freilich
Director of Earth Science Division,
National Aeronautics and Space Administration (NASA),
United States

Stephen Volz
Assistant Administrator for Satellite and Information Services,
National Oceanic and Atmospheric Administration (NOAA),
United States

11:30 - 13:00 Landsat-Copernicus Sentinel 2 Collaboration: Integrated Operational Land Imaging to Meet User Needs Worldwide

Location: CCB Focke-Wulf-Saal
Format: Panel Discussion

Organizers /Facilitators::

Astrid-Christina Koch
Copernicus International Coordination Officer,
European Commission,
Belgium

Timothy Stryker
Acting Associate Program Coordinator, National Land Imaging Program,
U.S. Geological Survey,
United States

Landsat-Copernicus Sentinel 2 Collaboration: Integrated Operational Land Imaging to Meet User Needs Worldwide

Come learn about the benefits of Copernicus/Sentinel 2-Landsat collaboration to the global user community! The U.S. Geological Survey and the European Commission will host a special session on current and future collaboration between the U.S. Landsat and European Sentinel-2 missions. This session will showcase the benefits of increased precision, revisit time, and long-term data continuity for land-imaging users. Come dialogue with European and U.S. officials to learn their land-imaging plans and better inform their collaboration!

Speakers:

Carsten Brockmann
Managing Director,
EBrockmann Consult GmbH,
Germany

Steven Covington
Systems Director and Principal Systems Engineer for the USGS National Land Imaging Program,
The Aerospace Corporation,
Germany

Peter Doucette
Acting Deputy Director, Earth Resources Observation and Science Center,
U.S. Geological Survey,
United States

Michael Freilich
Director of Earth Science Division,
National Aeronautics and Space Administration (NASA),
United State

Nicolaus Hanowski
Head, Mission Management & Ground Segment Department,
European Space Agency (ESA),
Italy

Grega Milcinski
CEO and Co-Founder,
Sinergise,
Slovenia

Tim Newman
Program Coordinator, National Land Imaging Program,
U.S. Geological Survey,
United States

Martin Polak
Director, Pre-Sales,
Planet,
Germany

Zoltan Szantoi
Scientific/Technical Project Officer,
European Commission Joint Research Centre,
Italy

11:30 - 13:00 The Golden Age of European Earth Observation

Location: CCB Gallery
Format: Panel Discussion

Organizer:

Agnieszka Łukaszczyk
Senior Director, European Policy,
Planet,
Belgium

The Golden Age of European Earth Observation

The golden age of European Earth Observation is here. Copernicus is an outstanding program but there is more to this recent success that goes beyond the terabytes of data delivered to the ground daily. This panel will provide context to these efforts and highlight some suggestions to (a) shift Europe's 'grantprepreneurs' to become 'entrepreneurs,' (b) the opportunity to attract 'scale-ups' to Europe, and (c) initiate the shift toward procuring commercial services.

Speakers:

Josef Aschbacher
Director of Earth Observation Programmes and Head of ESRIN,
European Space Agency (ESA),
Italy

Thibaud Delourme
Team leader for Copernicus User Uptake,
European Commission,
Belgium

Pascale Ehrenfreund
Chair of Executive Board,
German Aerospace Center (DLR),
Germany

François Lombard
Director of Intelligence Business,
Airbus Defence and Space,
France

Will Marshall
CEO,
Planet,
United States

Rafał Modrzewski
CEO,
ICEYE,
Finland

14:45 - 16:15 New Approaches to Space for a Better World: Space for Sustainable Development

Location: CCB Focke-Wulf-Saal
Format: Panel Discussion

Organizer:

Masami Onoda
Director, Washington D.C. Office,
Japan Aerospace Exploration Agency (JAXA),
Japan

New Approaches to Space for a Better World: Space for Sustainable Development

This interactive workshop will focus on new approaches in space science, technology and economy to achieve a better and more sustainable world. Come meet and exchange views with the prominent experts, new businesses and innovators to find out about their unique efforts using space as an enabling resource towards a future society for all. This includes efforts that lead to achieving the Sustainable Development Goals, for instance towards healthier lives, more opportunities for different genders, enhancing the economy and providing more employment, more resilient infrastructure and inspiring the future generations. The session will aim to contribute to both IAF and IAC 2018 mottos by "Connecting People for Space and Sustainability"; and "#InvolvingEveryone" for achieving sustainable development through space.

Speakers:

Josef Aschbacher
Director of Earth Observation Programmes and Head of ESRIN,
European Space Agency (ESA),
Italy

Christopher Blackerby
COO,
ASTROSCALE Pte. LTD.,
Republic of Singapore

James Green
Chief Scientist,
National Aeronautics and Space Administration (NASA),
United States

Seishiro Kibe
VP for Honours and Awards,
International Astronautical Federation (IAF),
Japan

Chiaki Mukai
Vice President, JAXA Astronaut,
Tokyo University of Science (TUS),
Japan

Adam Lewis
Acting Chief Scientist,
Geoscience Australia,
Australia

Ruth Pritchard-Kelly
Vice President Regulatory Affairs,
OneWeb,
United States

Mukund Rao
Adjunct Professor,
National Institute of Advanced Studies (NIAS),
India

16:30 - 17:30 Galileo, the European Global Navigation System

Location: CCB Gallery
Format: Award Presentation

Organizer:

Berndt Feuerbacher
Chairman, DGLR Awards Committee,
Deutsche Gesellschaft für Luft-und Raumfahrt, Lilienthal-Oberth e.V. (DGLR),
Germany

Galileo, the European Global Navigation System

Jointly created by the EU and ESA, Galileo is an outstanding European system to provide independent high precision global positioning. The industrial team of OHB, which has been awarded the DGLR Wernher-von-Braun Team Award, will inform about the novel manufactoring process as well as status and performance of the Galileo system.

Speakers:

Ingo Engeln
Member of Board,
OHB,
Germany

Paul Flament
Head of Unit for Galileo and EGNOS,
European Commission,
Belgium

Marco Fuchs
CEO,
OHB / OHB System AG,
Germany

Rolf Henke
President,
Deutsche Gesellschaft für Luft-und Raumfahrt, Lilienthal-Oberth e.V. (DGLR),
Germany

Heinz Stoewer
CEO,
Space Associates,
Germany

16:30 - 18:00 Challenges, Technologies and Solutions for Exploration of Icy and Ocean Worlds

Location: CCB Focke-Wulf-Saal
Format: Panel Discussion

Organizers:

Terry J. Hendricks
Technical Group Supervisor, Thermal Energy Conversion ApplicaWons & Systems,
NASA Jet Propulsion Laboratory (JPL),
United States

David F. Woerner
Principal Engineer, NASA's Radioisotope Power Systems,
NASA Jet Propulsion Laboratory (JPL),
United States

Challenges, Technologies and Solutions for Exploration of Icy and Ocean Worlds

Recent findings point to oceans on icy bodies across the solar system. Few mission designs exist for these bodies and few technologies have been prepared for exploration, yet scientific interest in such missions continues to grow. This session will explore barriers, informational gaps, requirements, and challenges for missions and technologies for exploration for these destinations. A broad spectrum of related topics will be addressed, from mission requirements and design considerations to detailed ice penetration modeling.

Speakers:

Tom Cwik
Manager, Space Technology,
NASA Jet Propulsion Laboratory (JPL),
United States

Oliver Funke
Project Manager, Coordinator of DLR Explorer Initiatives,
German Aerospace Center (DLR),
Germany

Brent Sherwood
Program Manager, Solar System Mission Formulation,
NASA Jet Propulsion Laboratory (JPL),
United States

Sam Thurman
Deputy Manager (actg.), Europa Lander Pre-Project,
NASA Jet Propulsion Laboratory (JPL),
United States

Thursday 4 october 2018

09:45 - 11:15 Twenty Years of the International Space Station: Shaping the Future of Human Space Exploration

Location: CCB Focke-Wulf-Saal
Format: Multiple Panel Discussion

Organizers:

Jean-François Clervoy
ESA Astronaut / Novespace Chairman,
European Space Agency (ESA) / Novespace,
France

Julie Patarin-Jossec
Ph.D. Candidate at the Centre Emile Durkheim (France); Resident-Teacher in Sociology & Ethnography at the SPBGU,
State University of St. Petersburg,
Russian Federation

Justin St. P. Walsh
Associate Professor of Art History and Archaeology; Chair, Department of Art,
Chapman University,
United States

Twenty Years of the International Space Station: Shaping the Future of Human Space Exploration

Celebrating anniversaries is always a chance to learn lessons and create future opportunities to surpass past achievements. On its twentieth orbital anniversary, exploitation of the International Space Station approaches a major turning-point, involving private actors and customers. Join a collective debate with top ISS program representatives, astronauts and experts to discuss how its social, cultural, technical, operational and political heritage will shape the future of the human exploration beyond LEO.

Speakers:

Jacques Arnould
Ethics Advisor,
Centre National d'Études Spatiales (CNES),
France

Nicolas Chamussy
Executive Vice President Space Systems,
Airbus Defence & Space,
France

John Charles
Chief of the International Science Office; NASA Human Research Program,
NASA Johnson Space Center (JSC) / NASA Engineering and Safety Center (NESC) Academy,
United States

Jean-Jacques Dordain
Former ESA General Director; Advisor of Several Organizations and Governments in France, Europe and UAE,
European Space Agency (ESA),
France

Bernard Foing
International Lunar Exploration Working Group (ILEWG) Director,
European Space Agency (ESA),
The Netherlands

Alice Gorman
Director of Studies in Archaeology,
Flinders University,
Australia

Jules Grandsire
Head of Public Relations and Communications,
European Space Agency (ESA),
Germany

Mikhail B. Kornienko
Test Cosmonaut,
Gagarin Research & Test Cosmonaut Training Center,
Russian Federation

Julie A. Robinson
Chief Scientist, International Space Station on Assignment as Associate Director, Human Research Program,
National Aeronautics and Space Administration (NASA),
United States

Koichi Wakata
Vice President; Director General of Human Spaceflight Technology Directorate,
Japan Aerospace Exploration Agency (JAXA),
Japan

09:45 - 11:15 Space Journalism and Outreach Workshop

Location: CCB Lilienthal
Format: Workshop

Organizer:

Mikko Suominen
Science Journalist,
Finnish Astronautical Society,
Finland

Space Journalism and Outreach Workshop

Commercial dreams stated as facts, result driven scientific research and biased reporting are just some of the challenges that journalists face today. The quality of media is not always easy to measure, but aiming for objective view and scientifically correct facts are still the basic ingredients for trustworthy articles and press releases. The aim of this special session is to take a look at some of the challenges the space media is facing these years. The panel offers viewpoints from both an outreach specialist making a press release and a journalist using it for different purposes. There will also be time for group discussion to broaden the perspectives. The session is intended for media professionals and anyone else interested in the subject. You can also ask questions or suggest discussion subjects in Twitter with #iac2018journalism.

11:30 - 13:00 Quantum Technologies for Space – Development and Applications

Location: CCB Focke-Wulf-Saal
Format: Elevator Pitches & Panel Discussion

Organizers:

Markus Krutzik
Group Lead Miniaturized Quantum Technologies,
Humboldt-Universität zu Berlin,
Germany

Claus Lämmerzahl
Professor / Director of Space Science,
ZARM, University of Bremen,
Germany

Quantum Technologies for Space – Development and Applications

It's happening now. Quantum technologies promise to change the way mankind will communicate, navigate and compute in the future. The environment of space unleashes the full potential of quantum technologies, it offers the opportunity to achieve higher sensitivities, unprecedented stabilities and secure large-area free-space communication protocols. This special session combines these aspects with world class scientists and technologist to explore our future of quantum technologies in space. Join us for a glimpse on the future.

Facilitators:

Oliver Anton
PhD Student,
Humboldt-Universität zu Berlin,
Germany

Akash Kaparthy
MSc. Student,
Humboldt-Universität zu Berlin,
Germany

Speakers:

Thomas Driebe
Research Under Space Conditions, Program Director Physical Research,
German Aerospace Center (DLR),
Germany

Ronald Holzwarth
CEO,
Menlo Systems GmbH,
Germany

Claus Lämmerzahl
Professor / Director of Space Science,
ZARM, University of Bremen,
Germany

Alexander Ling
Associate Professor / Principal Investigator Space-Grade Quantum Optics,,
Centre for Quantum Technologies,
Republic of Singapore

Ernst Rasel
Professor,
Leibniz Universiät Hannover,
Germany

Stephan Seidel
Systems Engineer,
OHB Quantum Technologies Working Group
Germany

14:45 - 16:15 Global Space Exploration: Increasing Benefits through International and Commercial Partnerships

Location: CCB Focke-Wulf-Saal
Format: Workshop

Organizers:

Bernhard Hufenbach
Team Lead, Strategy and Innovation,
European Space Agency (ESA),
The Netherlands

Kathy Laurini
Senior Advisor, Exploration and Space Operations,
National Aeronautics and Space Administration (NASA),
United States

Global Space Exploration: Increasing Benefits through International and Commercial Partnerships

In January 2018 ISECG released the third version of the Global Exploration Roadmap. The Global Exploration Roadmap reflects the common human space exploration vision of space agencies around the world. This session will open a dialogue on partnership opportunities to realise human and robotic space exploration for all stakeholders, including private sector space exploration actors and initiatives. The dialogue will include a discussion on technology challenges for Moon and Mars, and a collaborative approach to address corresponding gaps.

Facilitator:

Naoki Sato
Director, Space Exploration System Technology Unit,
Japan Aerospace Exploration Agency (JAXA),
Japan

Speakers:

Khaled Al Hashmi
Director of Space Missions, Science and Technology,
Mohammed Bin Rashid Space Centre (MBRSC),
United Arab Emirates

Timothy Cichan
Space Exploration Architect,
Lockheed Martin,
United States

John Connolly
Lead Exploration Architect,
National Aeronautics and Space Administration (NASA),
United States

Jason Crusan
Advanced Exploration Systems Division Director,
National Aeronautics and Space Administration (NASA),
United States

Christian Fidi
Chief Technology Officer,
TTTech,
Austria

Paul Fulford
Manager, Product Development,
MacDonald, Dettwiler and Associates (MDA) Corp.,
Canada

Luis Gomes
Chief Technology Officer,
Surrey Satellite Technology Ltd (SSTL),
United Kingdom

Iwao Igarashi
Deputy Director, Engineering,
Mitsubishi Heavy Industries (MHI),
Japan

Markus Landgraf
Architecture Analyst,
European Space Agency (ESA),
Germany

Sho Nakanose
CEO,
GITAI Inc.
Japan

Christian Sallaberger
President and CEO,
Canadensys Aerospace Corporation,
Canada

Matthias Simnacher
Innovation Facilitator,
Merck
Germany

Hiroshi Ueno
Associate Senior Administrator Business Development Group,
Japan Aerospace Exploration Agency (JAXA),
Japan

16:30 - 18:00 Quantum Key Distribution – The Future of Cryptography

Location: CCB Focke-Wulf-Saal
Format: Panel Discussion

Organizer:

Tom Vergoossen
Research Assistant,
Centre for Quantum Technologies,
Republic of Singapore

Quantum Key Distribution – The Future of Cryptography

Cyber-security is set to be challenged by the advent of quantum computing requiring encryption methods with forward security to be implemented now rather than later. Satellite Quantum Key Distribution (QKD) is a method of delivering provably secure encryption keys globally. Information is encoded in the quantum properties of light such that any eavesdropping can be detected. During a panel discussion key stakeholders in the field will share their visions for the future of cyber-security.

Speakers:

Paolo Bianco
Manager Global R&T,
Airbus Defence and Space,
United Kingdom

LIAO Shengkai
Senior Designer Micius Satellite System,
University of Science and Technology of China,
China

Alexander Ling
Associate Professor / Principal Investigator Space-Grade Quantum Optics,
Centre for Quantum Technologies,
Republic of Singapore

David Mitlyng
Chief Operating Officer,
S15 Space Systems, Quantum-safe Communications,
United States

Morio Toyoshima
Director Space Communications Laboratory,
National Institute of Information and Communications Technology,
Japan

Harald Weinfurter
Professor of Experimental Quantum Physics,
Ludwig-Maximilians-Universität München,
Germany

Eric Wille
Optical Systems Engineer,
European Space Agency (ESA),
The Netherlands

Friday 5 October 2018

09:45 - 10:45 #HiddenNoMore: Empowering Young Women in the Space Sector

Location: ÖVB 4
Format: Panel Discussion

Organizers:

Fabiana Milza
COO,
IceKing GmbH,
Italy

Fatoumata Kebe
Astronomer,
Association Ephemerides,
France

#HiddenNoMore: Empowering Young Women in the Space Sector

The success of the movie Hidden Figures inspired a joint exchange program of 21st Century Fox and U.S State Department called "#HiddenNoMore: Empowering Women Leaders in STEM". What is happening in the space industry and academia? Which are the issues faced by women from all over the world? The aim is to compare two different generations of women, pointing out the importance of mentorship. We want women in STEM fields to be hidden no more.

Speakers:

Ayu Abdullah
Regional Director for Southeast Asia,
Energy Actions Partners,
Malaysia

Lisseth Gavilan
NASA postdoctoral fellow / Astrochemist,
National Aeronautics and Space Administration (NASA),
United States

Lucie Poulet
Researcher,
Institute Pascal,
France

09:45 - 11:15 Commercial Suborbital: Opening the Aperture for Space Utilization

Location: CCB Focke-Wulf-Saal
Format: Workshop

Organizers:

Alvaro Alonso
Business Development Manager,
Telespazio VEGA Deutschland GmbH,
Germany

Thorben Könemann
Deputy Scientific Director,
ZARM, University of Bremen,
Germany

Alan Stern
Co-Founder and Chief Scientist,
World View Enterprises,
United States

Erika Wagner
Payload Sales Director,
Blue Origin,
United States

Commercial Suborbital: Opening the Aperture for Space Utilization

The doors to space are opening wide as commercial suborbital launches are beginning worldwide. How do you get from an idea to your payload in space? This session will provide an overview of the state of commercial suborbital rockets and balloons, then turn to an engaging discussion on how to get more researchers, students, and entrepreneurs personally engaged in this new frontier.

Facilitators:

Alvaro Alonso
Business Development Manager,
Telespazio VEGA Deutschland GmbH,
Germany

Karin Nilsdotter
CEO,
Spaceport Sweden,
Sweden

Speakers:

Sirisha Bandla
Business Development & Government Affairs Manager,
Virgin Galactic,
United States

Steven Collicott
Professor,
Purdue University,
United States

Thorben Könemann
Deputy Scientific Director,
ZARM, University of Bremen,
Germany

Karin Nilsdotter
CEO,
Spaceport Sweden,
Sweden

Alan Stern
Co-Founder and Chief Scientist,
World View Enterprises,
United States

Erika Wagner
Payload Sales Director,
Blue Origin,
United States

11:00 - 12:00 Adoption of Space Technologies and Applications in Emerging/NewSpace Actors

Location: ÖVB 4
Format: Panel Discussion

Organizer:

Narayan Prasad Nagendra
Co-Founder,
satsearch.co,
Germany

Adoption of Space Technologies and Applications in Emerging/NewSpace Actors

What are the new vantage points through with emerging/NewSpace actors view their commitments and investments in novel space technologies and applications? How long is the road to the reality of adoption for novel users of new tools today created from space?

Discover how emerging space/NewSpace efforts are creating new narratives for the adoption of space applications in tackling the challenge of sustainable development of their local communities by introduction of space-based technology.

Speakers:

Salem Humaid Al Marri
Assistant DG for Science & Technology Sector,
Mohammed Bin Rashid Space Centre (MBRSC),
United Arab Emirates

Prateep Basu
Co-Founder,
SatSure,
India

Leehandi de Witt
Sales and Marketing Manager,
NewSpace Systems,
South Africa

Meidad Pariente
CTO and Founder,
Sky and Space Global,
United Kingdom

YANG Justin
CEO,
Spacety,
China

11:00 - 12:00 Creating Strategic University Partnerships through International Student Projects

Location: CCB Bessel
Format: Workshop

Organizer/Facilitator:

Kim Ellis
Director,
International Earth & Space Technology,
Australia

Creating Strategic University Partnerships through International Student Projects

University-Industry Interaction and Collaboration has the capacity to drive innovation and entrepreneurship if done the right way. Learn the 5 success factors for strategic Industry-University collaboration which yields results with Business Impact. We will present techniques to establish or enhance a cost effective student project program which solves a technical research or operational problem and promotes innovative solutions. Industry participants will learn how a Strategic University Partnership which begins with student projects can form the basis of a strategic workforce development program and walk out of the session with a future workforce development framework specifically for your business.

11:30 - 13:00 A Scientific "Wish List" for Research Facilities on the Moon

Location: ÖVB 1
Format: Group Discussion

Organizer:

Christiane Heinicke
Researcher,
ZARM, University of Bremen,
Germany

A Scientific "Wish List" for Research Facilities on the Moon

Humans will return to the Moon within the next decades. Now is the time for scientists and to join efforts and identify their discipline's potential goals on the moon and identify synergies with other scientific fields. This session is therefore aimed to explore the basic question of "How should a laboratory on the moon be equipped?", and we are soliciting inputs from reseachers of any discipline holding an interest in exploiting the moon scientifically.

Speakers:

Bram de Winter
Student,
VU Amsterdam,
The Netherlands

Miranda Fateri
Researcher,
German Aerospace Center (DLR),
Germany

Nina Kopacz
PhD Student,
Utrecht University,
The Netherlands

11:30 - 13:00 Innovative Spacecraft Concepts and Servicing

Location: CCB Focke-Wulf-Saal
Format: Panel Discussion

Organizers:

Joerg Kreisel
Chairman, CEO / Co-Founder
JKIC / iBOSS GmbH,
Germany

Daniel Noelke
Programme Manager iBOSS, PERASPERA in EU-Horizon2020,
German Aerospace Center (DLR),
Germany

Bernd Sommer
Head Automation & Robotics,
German Aerospace Center (DLR),
Germany

Innovative Spacecraft Concepts and Servicing

Pave the way towards future orbital infrastructure.

Translate the increasing needs of society into technological requirements for the next satellite generations and robotic servicers.

Create sustainability through "cooperative" spacecraft design to meet major demands like: adjustability to customers' desires and mission needs, rapid development and production on demand, easy maintainability, debris avoidance and cost-efficiency. Next Generation Space Flight Equation: Sustainability = Robotics + Servicing + Standardization + Modularity = new operational concepts and business models!

Facilitators:

Joerg Kreisel
Chairman, CEO / Co-Founder
JKIC / iBOSS GmbH,
Germany

Daniel Noelke
Programme Manager iBOSS, PERASPERA in EU-Horizon2020,
German Aerospace Center (DLR),
Germany

Speakers:

Joseph D. Anderson
Vice President Business Development and Operations,
Space Logistics LLC, Northrop Grumman,
United States

Robert Feierbach
Vice President Business Development and Operations,
Space Systems Loral (SSL),
United States

Yann Gouy
Head of On-Orbit Services Business Development,
Airbus Defence and Space,
France

Dan King
Director of Business Development,
MacDonald, Dettwiler and Associates (MDA) Corp.,
Canada

Joerg Kreisel
Chairman, CEO / Co-Founder
JKIC / iBOSS GmbH,
Germany

Xavier Lacombe
Managing Director,
Willis Inspace,
France

Daniel Noelke
Programme Manager iBOSS, PERASPERA in EU-Horizon2020,
German Aerospace Center (DLR),
Germany

Luca Rossettini
CEO,
D-Orbit
Italy

Silvio Sandrone
Vice President, Advanced Projects & Products, On-Orbit Services and Exploration,
Airbus Defence & Space,
Germany

Arnon Spitzer
General Manager & Founder,
Effective Space Solution Ltd.,
United Kingdom

Hiroshi Ueno
Associate Senior Administrator Business Development Group,
Japan Aerospace Exploration Agency (JAXA),
Japan

Brian Weeden
Director of Program Planning,
Secure World Foundation (SWF),
United States

12:15 - 13:15 Space Chemistry: a Key to Fostering Space Exploration

Location: CCB Bessel
Format: Panel Discussion

Organizer:

Darvas Ferenc
Founder and Chairman,
Flow Chemistry Society,
Switzerland

Space Chemistry: a Key to Fostering Space Exploration

Have you ever wondered if chemistry is different in space than on the ground? Can chemistry be performed using and taking advantage of the extreme conditions in space?

Novel challenges of space research require an enhanced role for chemistry. The discussion will cover a wide range of pioneering chemistry technologies from space perspectives, including flow chemistry, photoelectrochemistry, and more novel trends in chemistry. These innovations are also facilitating Mars exploration, including human expeditions.

Speakers:

Bertalan Farkas
Cosmonaut,
Hungary

B. Frank Gupton
Floyd D. Gottwald Chaired Professor,
Virginia Commonwealth University,
United States

Csaba Janáky
Principal Investigator,
University of Szeged,
Hungary

Guy Samburski
Head of Chemical and Pharmaceutical Technologies,
SpacePharma SA,
Israel

12:15 - 13:15 2018: 10 years Columbus in Space and Delivery of Orion European Service Module

Location: ÖVB 4
Format: Panel Discussion

Organizer:

Markus Jäger
System Engineer,
Airbus Defence and Space,
Germany

2018: 10 years Columbus in Space and Delivery of Orion European Service Module

On February 7, 2008, the Space Shuttle Atlantis launched into space with Columbus on board. For ten years now, the space laboratory Columbus has been an integral and important part of the International Space Station ISS. In 2018 the Orion European Service Module is delivered to the Kennedy Space Center as latest European contribution to human-rated space exploration. Panelists from European and US industries and agencies will present their view on the past, actual and future European space exploration missions.

Facilitators:

Markus Jäger
System Engineer,
Airbus Defence and Space,
Germany

Siegfried Monser
Head of Communications,
Airbus Defence and Space,
Germany

Speakers:

Nico Dettmann
HRE Development Projects Group Leader,
European Space Agency (ESA),
Germany

William Hartwell
Project Manager,
National Aeronautics and Space Administration (NASA),
United States

Jens Lassmann
Head of Site Bremen ArianeGroup,
ArianeGroup,
Germany

Bas Theelen
Orion ESM Program Manager,
Airbus Defence and Space,
The Netherlands

13:15 - 14:45 Space Needs Everyone's Ideas! Prizes and Challenges in the Space

Location: CCB Bergen
Format: Panel Discussion

Organizers:

Zoe Szajnfarber
Associate Professor,
The George Washington University,
United States

Ademir Vrolijk
PhD Candidate,
The George Washington University,
United States

Space Needs Everyone's Ideas! Prizes and Challenges in the Space

"No matter who you are, most of the smartest people work for someone else."
Prizes and challenges provide a way for space agencies to leverage great ideas from the public in order to broaden participation and bridge technology gaps. This panel will feature experts from NASA, ESA, and academia discussing successes and lessons learned on how organizations can best use these open innovation tools, and how individuals can find exciting opportunities to participate.

Speakers:

Jason Crusan
Advanced Exploration Systems Division Director,
National Aeronautics and Space Administration (NASA),
United States

Jennifer Gustetic
Small Business Innovation Research (SBIR/STTR) Program Executive,
National Aeronautics and Space Administration (NASA),
United States

Leopold Summerer
Advanced Concepts Team Head,
European Space Agency (ESA),
The Netherlands

Zoe Szajnfarber
Associate Professor,
The George Washington University,
United States

13:50 - 14:50 RF Spectrum for TT&C – Regulatory Framework vs. Needs of Operators

Location: CCB Focke-Wulf-Saal
Format: Panel Discussion

Organizer/Facilitator: :

Martin Buscher
Scientist & Lecturer,
TU Berlin,
Germany

RF Spectrum for TT&C – Regulatory Framework vs. Needs of Operators

Hundreds of new satellites are launched every year, but how is the available RF spectrum for TT&C affected? Is there a need to change regulatory procedures to accommodate the vast number of new satellites and to guarantee interference-free satellite communication? This panel discussion will bring together experts from the regulatory sector and the satellite developer community to discuss the efficient shared use of the available RF spectrum.

Speakers:

Hans Blondeel Timmerman
Amateur Satellite Advisor,
International Amateur Radio Union,
The Netherlands

Raghu Das
Co-Founder & Senior VP,
Helios Wire,
United States

Per Koch
Senior Manager, Head of Systems Engineering,
GomSpace Aps,
Denmark

Attila Matas
Consultant, Frequency Coordination Expert,
Orbit Spectrum,
Switzerland

Katherine Monson
Head of US Operations,
Kongsberg Satellite Services AS,
United States

Alexandre Vallet
Chief of Space Services Department, Radiocommunication Bureau,
International Telecommunication Union (ITU),
Switzerland

15:00-16:30 The European Research Council – Funding Opportunities For Bright Minds

Location: CCB Franzius
Format: Workshop

Organizer:

Samantha Christey
Head of Sector, ERC outreach Communication Unit,
European Research Council Executive Agency (ERCEA),
Belgium

The European Research Council – Funding Opportunities For Bright Minds

Is an ERC grant for you? Come and find out. We will explain what the European Research Council is and who can benefit from its funding opportunities. As part of the European Commission's programmes supporting research, the ERC helps researchers in pursuing interesting and ambitious projects. The session will be a unique opportunity to ask grantees about their experience with the process and for experts to answer questions about the application and selection process.

Facilitator:

Isabelle Ortmans
Head of Sector for Computer Science, Engineering and Earth System Science,
European Research Council Executive Agency (ERCEA),
Belgium

Speakers:

Camilla Colombo
Associate Professor of Aerospace Engineering,
Polytechnic University of Milan,
Italy

Michael Kramer
Professor of Astrophysics,
University of Manchester,
United Kingdom

Klaus Schilling
Professor and Chair for Robotics and Telematics,
University of Würzburg,
Germany

15:00 - 16:30 The Design Sprint: How to Solve Almost Any Challenge in Less Than a Week

Location: CCB Bergen
Format: Workshop

Organizer:

Marc C. Lange
Founder / Google Expert & Head Mentor,
Challengers,
Germany

The Design Sprint: How to Solve Almost Any Challenge in Less Than a Week

In this session, participants will learn about the Design Sprint by a Design Sprint Master, and get to experience first-hand how it works. A Design Sprint is an open-source, interdisciplinary workshop format with the goal of iterating on a soft- or hardware technical solution, product, service, process or solution to a strategic challenge, without the need to build and roll it out. The Design Sprint is based on the popular problem-solving method Design Thinking.

15:00 - 16:30 Latin America Beyond LEO: Securing Regional Participation in the Moon Village

Location: CCB Focke-Wulf-Saal
Format: Group Discussion

Organizers:

Piero Messina
Relations with Member States Office,
European Space Agency (ESA),
France

Ronnie Nader
Space Operations Director,
Ecuadorian Civilian Space Agency (EXA),
Ecuador

Alberto Ramirez
Head of High Technology Unit,
UNAM Faculta de Ingenieria UAT,
Mexico

Pilar Zamora
Head of Agency,
Colombian Civilian Space Agency,
Colombia

Latin America Beyond LEO: Securing Regional Participation in the Moon Village

United towards the Moon: this session will be an open discussion about why Latin America and the Caribbean region should insert lunar research into its current space activities, actually limited to earth's orbit and in the end of the session we will draw conclusions and plan the steps ahead in order to secure a place for the region in the Moon Village. We will also discuss financial support architecture, opportunities and plans.

Facilitator:

Ronnie Nader
Space Operations Director,
Ecuadorian Civilian Space Agency (EXA),
Ecuador

Speakers:

Valanathan Munsami
CEO,
South African National Space Agency (SANSA),
South Africa

Alberto Ramirez
Head of High Technology Unit,
UNAM Faculta de Ingenieria UAT,
Mexico

Christopher Richins
Founder & CEO,
RBC Signals,
United States

John Thornton
Chief Executive Officer,
Astrobotic Technology Inc.,
United States

Pilar Zamora
Head of Agency,
Colombian Civilian Space Agency,
Columbia

6 Interactive Presentations

6.1 Category Coordinators and Members of the IP Award Committee

Chairman of the Interactive Presentations Award Committee

Christophe Bonnal

Centre National d'Etudes Spatiales (CNES),
France

Category A	SCIENCE AND EXPLORATION

Maria-Antonietta Perino

Thales Alenia Space,
Italy

Category B	APPLICATIONS AND OPERATIONS

Otto Koudelka

Graz University of Technology (TU Graz),
Austria

Category C	TECHNOLOGY

Li Ming

China Academy of Space Technology (CAST),
China

Category D	INFRASTRUCTURE

John-David Bartoe

National Aeronautics and Space Administration (NASA),
United States

Category E	SPACE AND SOCIETY

Lyn Wigbels

American Astronautical Society (AAS),
United States

6.2 Interactive Presentations Award Ceremony & Cocktail Reception

Date: Thursday 4 October

Time: 12:45 - 13:15

Location: IP Hall

Held on the fourth day of IAC, the IP Award Ceremony is the must-attend event of the congress.
Discover the 5 category winners at this prestigious ceremony attended by over 400 presenters, Members of the International Programme Committee and delegates. The prize-giving ceremony will be followed by a cocktail to meet and celebrate the winners. All the interactive presentations will be presented after the ceremony at 13:15.

Do not miss out on this great opportunity to meet with the presenters and make new connections.

Please note that this event is open to all IAC participants.

6.3 Interactive Presentations Session

Date: Thursday 4 October

Time: 13:15 - 14:45

Location: IP Hall

The Interactive Presentations Session is a dynamic forum that allows presenters and participants to engage in in-depth discussions about the presented work from which new collaborations, ideas, and solutions can emerge. Interactive presentations include multimedia, such as audio and video, as well as images and animations. Their flexibility helps foster presenters' creativity and skills, and provides a platform for building engaging, collaborative, and visually powerful presentations.

Presentations in the session will be conducted simultaneously on 38 screens, with each presenter informed of their specific presentation screen and time slot. Two additional screens have been reserved for late submissions. Each presenter has 10 minutes to present to their audience with Q&A, moderation by the Session Chairs, and transition time included; and it is up to the presenter to choose how much of that time to put toward questions in their presentation.

Sponsored by Glavkosmos

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6.4 Interactive Presentations by Symposium

IP	Symposia
A1.IP	IAF/IAA SPACE LIFE SCIENCES
A2.IP	IAF MICROGRAVITY SCIENCES AND PROCESSES
A3.IP	IAF SPACE EXPLORATION
A4.IP	47th IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The Next Steps
A5.IP	21st IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM
A6.IP	16th IAA SYMPOSIUM ON SPACE DEBRIS
A7.IP	IAF SYMPOSIUM ON FUTURE SPACE ASTRONOMY AND SOLAR-SYSTEM SCIENCE MISSIONS
B1.IP	IAF EARTH OBSERVATION
B2.IP	IAF SPACE COMMUNICATIONS AND NAVIGATION
B3.IP	IAF HUMAN SPACEFLIGHT
B6.IP	IAF SPACE OPERATIONS
C1.IP	IAF ASTRODYNAMICS
C2.IP	IAF MATERIALS AND STRUCTURES
C3.IP	IAF SPACE POWER
C4.IP	IAF SPACE PROPULSION
D1.IP	IAF SPACE SYSTEMS
D2.IP	IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS
D3.IP	16th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT
D4.IP	16th IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE
D5.IP	51st IAA SYMPOSIUM ON SAFETY, QUALITY AND KNOWLEDGE MANAGEMENT IN SPACE ACTIVITIES
E1.IP	IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM
E3.IP	31st IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS
E5.IP	29th IAA SYMPOSIUM ON SPACE AND SOCIETY
E6.IP	IAF BUSINESS INNOVATION SYMPOSIUM
E7.IP	61st IISL COLLOQUIUM ON THE LAW OF OUTER SPACE

6.5 Interactive Presentations Schedule

SCREEN # 1

13:15-13:25 IAC-18.A1.IP.1
HI-SEAS (HAWAII SPACE EXPLORATION ANALOG AND SIMULATION): OVERVIEW OF RESULTS FROM THE FOUR-, EIGHT- AND TWELVE-MONTH MISSIONS
Kim Binsted, University of Hawaii, United States

13:25-13:35 IAC-18.A1.IP.4
THE EDEN ISS ANTARCTIC GREENHOUSE PROJECT – 9 MONTH MISSION STATUS AFTER DEPLOYMENT IN ANTARCTICA
Daniel Schubert, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

13:35-13:45 IAC-18.A1.IP.8
AUTOMATION OF BIOLOGICAL EXPERIMENTS IN A MINIATURIZED SATELLITE
Simon Beaudry, Ecole Polytechnique de Montreal, Canada

13:45-13:55 IAC-18.A1.IP.9
SELF-PAYBACK MANNED EXPEDITION TO MARS AND ITS MOONS PHOBOS AND DEIMOS
2022
Oleg Aleksandrov, Private individual www.oleg.space, United States

13:55-14:05 IAC-18.A1.IP.12
CONSTITUTIONAL CHARACTERISTICS AND BONE MINERAL CONTENT IN ASTRONAUTS BEFORE AND AFTER FLIGHTS
Kirill Gordienko, Institute of Biomedical Problems, Russian Academy of Sciences, Russian Federation

14:05-14:15 IAC-18.A1.IP.14
IMITATION TASKS OF SPACECRAFT MANUAL CONTROL AND COSMONAUT'S PSYCHOPHYSIOLOGICAL PARAMETERS IN THE SPACE EXPERIMENT "PILOT-T"
Daria Schastlivtseva, SSC RF Institute of Biomedical problems of RAS, Russian Federation

14:15-14:25 IAC-18.A1.IP.15
A NOVEL WEARABLE ECG-MONITORING SYSTEM FOR HUMAN SPACE EXPLORATION
Natalia Glazkova, Skolkovo Institute of Science and Technology, Russian Federation

14:25-14:35 IAC-18.A1.IP.17
MYOTONPRO: A FAST-TRACK COTS PAYLOAD TO ENHANCE THE HUMAN PHYSIOLOGY RESEARCH ON ISS AND BEYOND.
Antonella Sgambati, OHB System AG-Bremen, Germany

14:35-14:45 IAC-18.A1.IP.18
BONE DENSITOMETRY AFTER LONG-TIME MISSIONS ON ISS
Galina Vassilieva, IBMP, Russian Federation

SCREEN # 1

13:15-13:25 IAC-18.A1.IP.20
TERRAFORMING MARS INTO A FUTURE HUMAN HABITAT- A FOUR - PHASE PROCESS
Siddharth Ojha, University of Petroleum and Energy Studies, India

13:25-13:35 IAC-18.A1.IP.22
REDUCTION OF HEALTH RISKS DURING LONG TERM SPACE MISSIONS BY PERSONALIZED QUANTIFICATION OF VITAMIN D PRODUCTION
Magdalena Wypukol, Charité Universitätsmedizin Berlin, Germany

13:35-13:45 IAC-18.A1.IP.23
APPLICATION OF A SELF-SUFFICIENT LEARN PROGRAM TO CONTROL OBJECTS WITH SIX DEGREES OF FREEDOM
Bernd Johannes, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

13:45-13:55 IAC-18.A1.IP.25
ULTRASOUND UTILIZATION TRAINING FOR APPLICATIONS IN MICROGRAVITY
Manuela Aguzzi, Space Applications Services N.V./S.A., Belgium

13:55-14:05 IAC-18.A1.IP.26
EFFECT OF MICROGRAVITY ON BREAST CANCER CELLS
Mohamed Zakaria Nassef, [unlisted], Germany

14:05-14:15 IAC-18.A1.IP.27
AN EPIGENETIC MECHANISM FOR DECREASED MHC - EXPRESSION IN MACROPHAGES UNDER SIMULATED MICROGRAVITY
Chongzhen WANG, Guilin Medical University, China

14:15-14:25 IAC-18.A1.IP.28
PROTON AND FE ION-INDUCED EARLY AND LATE CHROMOSOME ABERRATIONS IN HUMAN EPITHELIAL AND FIBROBLAST CELLS
Rosalin Goss, National Aeronautics and Space Administration (NASA), Johnson Space Center, United States

14:25-14:35 IAC-18.A1.IP.29
NEURAL ELECTRICAL DYNAMICS DURING HEAD DOWN TILT AND MENTAL LOAD
Hasan Birol Cotuk, , Turkey

14:35-14:45 IAC-18.A1.IP.34
LOCAL SLEEP-LIKE EVENTS IN AWAKE ASTRONAUTS
Gaetan Petit, ESA - European Space Agency, Switzerland

SCREEN # 3

13:15-13:25 IAC-18.A2.IP.1
NUMERICAL STUDY OF DETONATION ENGINES
Elena Mikhalchenko, Scientific Research Institute for System Analysis, Russian Academy of Sciences (RAS), Russian Federation

13:25-13:35 IAC-18.A2.IP.3
WEISS-SAT1:A STUDENT DEVELOPED MICROLAB FOR SPACE BASED RESEARCH
Rhonda Lyons, NYRAD Inc, United States

13:35-13:45 IAC-18.A2.IP.4
NUMERICAL SIMULATION OF DROPLETS CAPILLARY UNDER MICROGRAVITY WITH SMOOTHED PARTICLE HYDRODYNAMICS
Fuzhen Chen, Northwestern Polytechnical University, China

13:45-13:55 IAC-18.A2.IP.5
STUDY OF BACTERIA AND FUNGI GROWTH ON DIFFERENT MATERIALS USED ON THE ISS WITH PORTABLE GAS SENSOR SYSTEM E-NOSE DURING THE SPACE FLIGHT
Sergey Kharin, SSC RF-Institute of Biomedical Problems RAS, Russian Federation

13:55-14:05 IAC-18.A2.IP.6
IMPORTANT ASPECTS OF CONDUCTING AEROPONIC CULTIVATION IN MICROGRAVITY
Joanna Kuźma, Wroclaw University of Science and Technology, Poland

14:05-14:15 IAC-18.A2.IP.7
ON THE DESIGN OF BECCAL - A QUANTUM OPTICS EXPERIMENT ABOARD THE ISS
Marvin Warner, ZARM University of Bremen, Germany

14:15-14:25 IAC-18.A2.IP.8
MICROGRAVITY EXPERIMENTS ON THERMAL CREEP IN MARTIAN SOIL
Tobias Steinpilz, University Duisburg-Essen, Germany

14:25-14:35 IAC-18.A2.IP.9
THE HARDWARE DEVELOPMENT FOR THE LOW-SPEED LOW-LEWIS-NUMBER COUNTER FLOW FLAME EXPERIMENT ON ISS KIBO
Tatsuya Taguchi, Japan Aerospace Exploration Agency (JAXA), Japan

14:35-14:45 IAC-18.A2.IP.10
ARION 1 REUSABLE SOUNDING ROCKET: THE NEW MICROGRAVITY PLATFORM IN EUROPE
Francisco Garcia, PLD Space, Spain

SCREEN # 4

13:15-13:25 IAC-18.A3.IP.4
SHAPE DEVELOPMENT AND ANALYSIS FOR 3D-PRINTED HIGH-RESOLUTION MULTIPLE ELECTRODE HARMONISED KINGDON TRAP
Anastasiia Fursova, Skolkovo Institute of Science and Technology, Russian Federation

13:25-13:35 IAC-18.A3.IP.5
SEPARATION BEFORE EXTRACTION – A LOW-TECH APPROACH TO INCREASING THE YIELD OF LUNAR ISRU EXTRACTION PROCESSES
Juergen Schleppi, Heriot-Watt University, United Kingdom

13:35-13:45 IAC-18.A3.IP.7
DETECTION OF THE REDSHIFTED 21-CM RADIATION LINE: A MISSION CONCEPT STUDY FOR THE ESTABLISHMENT OF A LUNAR RADIO TELESCOPE ARRAY IN THE SCHRÖDINGER BASIN
Zaid Rana, Concordia University, Canada

13:45-13:55 IAC-18.A3.IP.8
EXPLORATION OF THE LUNAR SOUTH POLE THROUGH AUTONOMOUS NAVIGATION AND MAPPING SYSTEMS FOR MAXIMISING SCIENCE RETURN.
Philippe Ludivig, ispace, Inc, Luxemburg

13:55-14:05 IAC-18.A3.IP.9
SYSTEM DESIGN OF CUBESAT SEMI-HARD MOON IMPACTOR: OMOTENASHI
Tatsuaki Hashimoto, Japan Aerospace Exploration Agency (JAXA), Japan

14:05-14:15 IAC-18.A3.IP.13
THE MOON VILLAGE, A GRAND PROJECT FOR THE 21ST CENTURY
Olivier Boisard, Consulting engineer OB-Conseil, and professor at Ecole Centrale de Lille, France

14:15-14:25 IAC-18.A3.IP.16
MOONHOPPER: CONCEPTUAL DESIGN OF AN HOPPING ROBOT FOR LUNAR EXPLORATION SUPPORT
Rodrigo Ventura, Institute for Systems and Robotics, Portugal

14:25-14:35 IAC-18.A3.IP.21
POSITIONING METHOD OF CHANG'E-4 LANDER BASED ON MULTI-SOURCE IMAGES
Xinyuan Lu, National Key Laboratory of Aerospace Flight Dynamics,Northwestern Polytechnical University,Xi'an, China

14:35-14:45 IAC-18.A3.IP.23
FINDING THE NORTH ON A LUNAR MICROROVER: A LUNAR SURFACE ENVIRONMENT SIMULATOR FOR THE DEVELOPMENT OF VISION-BASED NAVIGATION PIPELINES
Fabian Dubois, ispace, Inc, Japan

SCREEN # 5

13:15-13:25 IAC-18.A3.IP.24
VALIDATION CAMPAIGN OF VISION-BASED NAVIGATION ALGORITHM FOR AUTONOMOUS PLANETARY LANDING
Luca Losi, Politecnico di Milano, Italy

13:25-13:35 IAC-18.A3.IP.26
RUN, CAMP, AND HIKE ON THE MOON
Antoine Faddoul, Tony Sky Designs Group, United States

13:35-13:45 IAC-18.A3.IP.27
A SOUTH POLE SOLAR ENERGY INFRASTRUCTURE TO POWER UP THE LUNAR ECONOMY
Adrian Stoica, NASA Jet Propulsion Laboratory, United States

13:45-13:55 IAC-18.A3.IP.30
OVERVIEW OF THE FIRST ISPACE PRIVATE LUNAR LANDER MISSION
Louis Burtz, ispace, Inc, Japan

13:55-14:05 IAC-18.A3.IP.31
3D PRINTING OF MOON HIGHLANDS REGOLITH SIMULANT
Lorenzo Abbondanti Sitta, Politecnico di Milano, Italy

14:05-14:15 IAC-18.A3.IP.33
ADAPTIVE IN-SITU RESOURCE UTILISATION (ISRU) FOR LONG TERM SPACE EXPLORATION
Satinder Shergill, Cranfield University, United Kingdom

14:15-14:25 IAC-18.A3.IP.35
ABOUT ORBIT SELECTION FOR LUNAR ORBITAL STATION
Mariya Danilova, Central Research Institute of Machine Building (TSNIIMASH), Russian Federation

14:25-14:35 IAC-18.A3.IP.37
PROTOTYPE OF A HOPTER - A HOPPING SCOUT ROBOT FOR PLANETARY EXPLORATION
Lukasz Wisniewski, Astronika, Poland

14:35-14:45 IAC-18.A3.IP.41
THE WIND SENSOR OF THE HABIT (HABITABILITY: BRINES, IRRADIATION AND TEMPERATURE) INSTRUMENT ON BOARD THE EXOMARS 2020 MISSION
Álvaro Tomás Soria Salinas, Luleå University of Technology, Sweden

SCREEN # 6

13:15-13:25 IAC-18.A3.IP.43
THE HIGH EFFICIENT COMMUNICATION METHOD OF MULTIPLE SPACECRAFTS BASED ON PROXIMITY-1 PROTOCOL FOR MARS EXPLORATION
Wei Wang, Beijing Institute of Technology, China

13:25-13:35 IAC-18.A3.IP.44
DESIGN OF A REUSABLE CRANE SYSTEM FOR MARS SURFACE MISSIONS
Anne-Marlene Rüede, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland

13:35-13:45 IAC-18.A3.IP.48
SPACE MINING CORPORATION: THE PSEUDO-ECONOMIC AND TECHNOLOGY MODEL
Aurthur Vimalachandran Thomas Jayachandran, Samara University, Russian Federation

13:45-13:55 IAC-18.A3.IP.51
MARSIS RADAR DATA INTERPRETATION TO CHARACTERIZE THE DEEPER LAYERS IN THE NORTH POLAR CAP ON MARS.
Melissa Mirino, Open University, United Kingdom

13:55-14:05 IAC-18.A3.IP.53
ENGINEERING MODEL OF POLARIMETRIC CAMERA FOR KOREAN LUNAR ORBITER
Kyungin Kang, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

14:05-14:15 IAC-18.A3.IP.57
PERTURBATION EFFECTS OVER A MERCURY ORBITER
Josué Cardoso dos Santos, São Paulo State University (FEG-UNESP), Brazil

14:15-14:25 IAC-18.A3.IP.59
ANALYSIS, TEST AND SIMULATION OF LANDING SYSTEM TOUCHDOWN DYNAMICS
Silvio Schröder, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

14:25-14:35 IAC-18.A3.IP.62
CISLUNAR1000: VISION FOR 2018-2035
Melissa Sampson, Ball Aerospace, United States

14:35-14:45 IAC-18.A3.IP.65
CUBESAT MINIMOON RENDEZVOUS MISSION SYNTHESIS AND ANALYSIS
Niklas Anthony, Luleå University of Technology, Sweden

SCREEN # 7

13:15-13:25 IAC-18.A1.IP.35
IMPACT OF THE SPACE FLIGHTS IN NUTRITIONAL ADAPTATIONS AT BACK TO EARTH. REVIEW.
LUISA GARCIA ROJAS VAZQUEZ, [unlisted], Mexico

13:25-13:35 IAC-18.A1.IP.37
CONSTRUCTION OF BASIC HUMAN HABITATS ON PLANETARY/ LUNAR PLACES WITHOUT DIRECT HUMAN INVOLVEMENT
ADITYA VEDANTHU, R.V.College of Engineering, India

13:35-13:45 IAC-18.A1.IP.39
DEVELOPMENT AND TESTING OF THE CÓNDOR SPACE SUIT SIMULATOR
Oscar Ivan Ojeda Ramirez, Universidad Nacional de Colombia, Colombia

13:45-13:55 IAC-18.A1.IP.40
SPACE FOOD AND NUTRITION IN A LONG TERM MANNED MISSION
Funmilola Adebisi Oluwafemi, National Space Research and Development Agency (NASRDA), Abuja, Nigeria

13:55-14:05 IAC-18.A2.IP.11
BURNING OF A SINGLE FUEL DROPLET CONTAINING METALLIC PARTICLES IN WEIGHTLESSNESS
Nickolay N. Smirnov, Moscow Lomonosov State University, Russian Federation

14:05-14:15 IAC-18.A2.IP.12
REALISTIC 3D SIMULATIONS OF BRAGG BEAM SPLITTERS FOR MATTER WAVE INTERFEROMETRY UNDER MICROGRAVITY
Antje Neumann, TU Darmstadt, Germany

14:15-14:25 IAC-18.A2.IP.13
NUMERICAL SIMULATION OF WICKING IN POROUS MEDIA
Dawid Zimnik, ZARM, University of Bremen, Germany

14:25-14:35 IAC-18.A2.IP.14
PHASE SEPARATION IN CAPILLARY CHANNEL FLOW USING POROUS MEDIA
Kamal Singh Bisht, ZARM, University of Bremen, Germany

14:35-14:45 IAC-18.A2.IP.15
PAPELL: INTERACTION STUDY OF FERROFLUID WITH ELECTROMAGNETS OF AN EXPERIMENT ON THE INTERNATIONAL SPACE STATION
Adrian Causevic, KSat e.V., Germany

SCREEN # 8

13:15-13:25 IAC-18.A4.IP.3
NEUROSCIENCE IN SETI : A CONTEMPORARY CASE STUDY FROM THE ARTS AND HUMANITIES.
Daniela de Paulis, , The Netherlands

13:25-13:35 IAC-18.A4.IP.4
SETI SEARCH WITH GAS CORE NUCLEAR PROPELLED SPACE PROBES
Ugur Guven, UN CSSTEAP, United States

13:35-13:45 IAC-18.A4.IP.6
THE SEARCH FOR EXTRA-TERRESTRIAL INTELLIGENCE AT TRAPPIST-1 E: POSSIBILITIES FOR LIFE
Devarrishi Dixit, University of Petroleum and Energy Studies, India

13:45-13:55 IAC-18.A4.IP.7
MERITS AND DEMERITS OF PERFORMING EXPERIMENTS AND EXOPLANET IMAGING OUTSIDE THE DISK OF OUR SOLAR SYSTEM AND POSSIBLE EXIT PATHS IN THE DIRECTION OTHER THAN THE PLANE OR OUR SOLAR SYSTEM TO EXIT THE PLANETARY PLANE
Aditya Mishra, University of Petroleum and Energy Studies, India

13:55-14:05 IAC-18.A3.IP.67
UTILIZATION OF RESOURCES ON TITAN AND TRANSITORY BASE-CAMP FOR MANNED OUTER SOLAR SYSTEM EXPLORATION
Kaustav Dutta Choudhury, University of Petroleum and Energy Studies, India

14:05-14:15 IAC-18.A3.IP.68
EVALUATION OF THE INTEGRATED HELMET OF THE AUTONOMOUS MODULE OF SUSTAINABLE COOLING – MARS
Julio Rezende, Brazilian Space Agency (AEB), Brazil

14:15-14:25 IAC-18.A3.IP.69
VIRTUAL REALITY FOR MULTI-USER EXPERIENCE IN SPACE MISSIONS
Antonio Del Mastro, Mars Planet, Italy

14:25-14:35 IAC-18.A3.IP.70
MEASUREMENT OF THE PARAMETERS OF THE GRAVITATIONAL FIELD OF DEEP SPACE.
Sergei Matvienko, Yuzhnoye SDO European Representation, Ukraine

SCREEN # 9

13:15-13:25 IAC-18.A5.IP.2
RENDEZVOUS IN LUNAR NEAR RECTILINEAR HALO ORBITS
Lorenzo Bucci, Politecnico di Milano, Italy

13:25-13:35 IAC-18.A5.IP.4
A NOVEL APPROACH TO VISUAL NAVIGATION BASED ON FEATURE LINE CORRESPONDENCES FOR MARS LANDING
Liang Cao, Qingdao University of Science and Technology, China

13:35-13:45 IAC-18.A5.IP.6
CONCEPTUAL DESIGN OF A PERMANENT LUNAR SURFACE BASE
Marius Schwinning, Institute of Space Systems, University of Stuttgart, Germany

13:45-13:55 IAC-18.A5.IP.8
TRAJECTORY DESIGN FOR PHOBOS & STUDY PROPOSITION OF GEODETIC FRAMEWORK FOR AN AUTOMATED MECHANICAL TRANSITORY BASE-CAMP ON PHOBOS
Rohan Chandra, University of Petroleum and Energy Studies, India

13:55-14:05 IAC-18.A2.IP.16
TIANZHOU'S REUSABLE CARGO SPACESHIP, A USEFUL AND POWERFUL PLATFORM FOR MICROGRAVITY SCIENCE
Ming Li, China Academy of Space Technology (CAST), China

14:05-14:15 IAC-18.A6.IP.12
COLLISION RISK PREDICTION FOR CONSTELLATION OPERATORS
Romain Lucken, , France

14:15-14:25 IAC-18.A6.IP.14
THE DEVELOPMENT OF AN ORBITAL RISK ASSESSMENT CAPABILITY
Toby Harris, UK Space Agency, United Kingdom

14:25-14:35 IAC-18.A6.IP.18
HYPERVELOCITY IMPACT NUMERICAL SIMULATIONS USING MATERIAL POINT METHOD COUPLED WITH EOS CALCULATED FROM MOLECULAR DYNAMICS METHOD
Yixiao Li, CASIC, China

14:35-14:45 IAC-18.A6.IP.19
SPACE DEBRIS RISK ASSESSMENT OF SPACECRAFT PROTECTED BY 3D PRINTED PANELS
Hedley Stokes, PHS Space Ltd, United Kingdom

SCREEN # 10

13:15-13:25 IAC-18.A6.IP.1
CASTELGAUSS PROJECT: OBSERVATIONS OF NEOS AND GSO OBJECTS AT THE ISON-CASTELGRANDE OBSERVATORY
Filippo Graziani, G.A.U.S.S. Srl, Italy

13:25-13:35 IAC-18.A6.IP.4
SCHEDULING SOLUTION FOR SPACE DEBRIS OBSERVATIONS
Federico Curianò, Sapienza University of Rome, Italy

13:35-13:45 IAC-18.A6.IP.5
SECONDARY RESONANCES DUE TO SOLAR RADIATION PRESSURE IN THE VICINITY OF GLONASS AND GPS REGIONS
Eduard Kuznetsov, Ural Federal University, Russian Federation

13:45-13:55 IAC-18.A6.IP.6
SLOVAKIAN OPTICAL SENSOR FOR HAMR OBJECTS CATALOGUING AND RESEARCH
Jiri Silha, Comenius University, Faculty of Mathematics, Physics and Informatics, Bratislava, Slovakia, Slovak Republic

13:55-14:05 IAC-18.A6.IP.7
SLR OBSERVATION OF TIANGONG-1
Hou-Yuan Lin, Purple Mountain Observatory, Chinese Academy of Sciences, China

14:05-14:15 IAC-18.A6.IP.8
IMPROVED SPACE OBJECT OBSERVATION TECHNIQUES IN ISON PROJECT
Igor Molotov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

14:15-14:25 IAC-18.A6.IP.9
TACKING THE ASSOCIATION AND TRACKING PROBLEMS USING DIRECTIONAL
statistics to model uncertainty
Shambo Bhattacharjee, University of Leeds, United Kingdom

14:25-14:35 IAC-18.A6.IP.10
THE MULTIBEAM RADAR SENSOR BIRALES: PERFORMANCE ASSESSMENT FOR SPACE SURVEILLANCE AND TRACKING
Matteo Losacco, Politecnico di Milano, Italy

14:35-14:45 IAC-18.A6.IP.11
THE S5S ONLINE PLATFORM FOR IMAGE ANALYSIS AND ORBIT DETERMINATION
Marco Acernese, Sapienza University of Rome, Italy

SCREEN # 11

13:15-13:25 IAC-18.A6.IP.20
STUDY ON PERFORMANCE OF SHIELDING CONFIGURATION STUFFED WITH AL-MESH AND BASALT FABRIC
Fa-wei Ke, China Aerodynamics Research and Development Center (CARDC) , China

13:25-13:35 IAC-18.A6.IP.20
STUDY ON THE SHIELDING PERFORMANCE OF CONFIGURATION STUFFED WITH ARAMID AND BASALT FABRIC COMPOSITE LAYER
Fa-wei Ke, China Aerodynamics Research and Development Center (CARDC) , China

13:35-13:45 IAC-18.A6.IP.21
ASSOCIATING SHORT-ARC RANGE AND ANGLE MEASUREMENTS OF OBJECTS IN LEO.
Alessandro Vananti, Astronomical Institute University of Bern (AIUB), Switzerland

13:45-13:55 IAC-18.A6.IP.22
LIGHTCURVE INVERSION FOR ATTITUDE DETERMINATION
Fabio Santoni, Sapienza University of Rome, Italy

13:55-14:05 IAC-18.A6.IP.23
MISSION PLANNING AND SIMULATION SYSTEM STUDY ON ACTIVE DEBRIS REMOVAL WITH SPACE-BASED LASER SYSTEM
Zizheng Gong, Beijing Institute of Spacecraft Environment Engineering, China Academy of Space Technology (CAST), China

14:05-14:15 IAC-18.A6.IP.25
QUANTUM ENHANCED LADAR BY SQUEEZED LIGHT FOR SPACE TARGET DETECTION
Jingting Ma, CASIC, China

14:15-14:25 IAC-18.A6.IP.27
AUTONOMOUS SPACE DEBRIS CAPTURING USING DEEP REINFORCEMENT LEARNING METHOD
Zhong Ma, Xi'an Microelectronics Technology Institute, China

14:25-14:35 IAC-18.A6.IP.28
DE-ORBITING LARGE SPACE DEBRIS OBJECTS FROM THE SUN-SYNCHRONOUS ORBIT BY AERODYNAMIC BRAKING
Vladislav Sidorenko, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

14:35-14:45 IAC-18.A6.IP.29
EXPLORATION OF THE FUTURE APPLICATION MODE OF LASER PROPULSION FOR THE SPACE DEBRIS REMOVAL
Jia Zhang, CALT,CASC, China

SCREEN # 12

13:15-13:25 IAC-18.A6.IP.30
PRELIMINARY STUDY ON DEORBIT OF LARGE DEBRIS USING A CHARGED SAIL IN LOW EARTH ORBIT
Takuma Nagata, Chukyo University, Japan

13:25-13:35 IAC-18.A6.IP.31
PROSPECTS OF TOUCHLESS SPACE DEBRIS DETUMBLING USING AN ELECTROSTATIC PUSHER CONFIGURATION
Vladimir S. Aslanov, Samara National Research University, Russian Federation

13:35-13:45 IAC-18.A6.IP.34
ACQUIRING OBSERVATIONS FOR TEST AND VALIDATION IN THE SPACE SURVEILLANCE AND TRACKING SEGMENT OF ESA'S SSA PROGRAMME
Beatriz Jilete, ESA, Spain

13:45-13:55 IAC-18.A6.IP.35
GEOTRACKER - A WORLDWIDE OPTICAL NETWORK FOR SPACE SITUATIONAL AWARENESS
Vourc'h Sébastien, ArianeGroup SAS, France

13:55-14:05 IAC-18.A6.IP.36
SAPIENZA SPACE SYSTEMS AND SPACE SURVEILLANCE NETWORK (S5N): A HIGH COVERAGE INFRASTRUCTURE FOR SPACE DEBRIS MONITORING.
Federico Curianò, Sapienza University of Rome, Italy

14:05-14:15 IAC-18.A6.IP.37
TRACKING ENVISAT: THE STRUCTURAL DEVELOPMENT OF E.INSPECTOR
Marlini Simoes, University of Cambridge, United Kingdom

14:15-14:25 IAC-18.A6.IP.39
INVESTIGATION OF AERODYNAMICS HEATING OF SPACE DEBRIS OBJECT DESCENDING IN EARTH ATMOSPHERE
Andrii Dreus, O. Honchar Dnipropetrovsk National University, Ukraine

14:25-14:35 IAC-18.A6.IP.40
OPTICAL DEGRADATION AND RECOVERY OF MULTILAYER INSULATION IN A SIMULATED GEO ENVIRONMENT
Daniel Engelhart, [unlisted], United States

14:35-14:45 IAC-18.A6.IP.41
POLIMI OPTICAL SENSOR FOR SPACE SURVEILLANCE AND TRACKING
Daniele Antonio Santeramo, Politecnico di Milano, Italy

SCREEN # 13

13:15-13:25 IAC-18.A7.IP.1
DUAL FREQUENCY SYNTHETIC APERTURE RADAR SATELLITE
Monish Mathur, University of Petroleum and Energy Studies, India

13:25-13:35 IAC-18.A7.IP.3
RESEARCH PROGRESS OF ON-ORBIT SERVICING TECHNOLOGY ON SPACE ASTRONOMY
Zhang Jiuxing, , China

13:35-13:45 IAC-18.A7.IP.4
FDIR STRATEGIES ON MISSIONS WITH HIGHLY SENSITIVE OPTICAL PAYLOADS
Bastian Burmann, OHB System AG-Bremen, Germany

13:45-13:55 IAC-18.A6.IP.42
TWO-FINGER CAGING-BASED GRASPING REGION DETERMINATION OF POLYGONAL SPACE DEBRIS WITH MOTION PARAMETERS UNCERTAINTY
Ma Chuan, College of Astronautics, Northwestern Polytechnical University (NPU), China

13:55-14:05 IAC-18.A6.IP.44
THE UAE SPACE DEBRIS MITIGATION INSTRUMENT
Fatheya Al Shareji, UAE Space Agency, United Arab Emirates

14:05-14:15 IAC-18.A6.IP.45
SERVICE OPERATIONS OF SPACECRAFTS AS A SOLUTION FOR SPACE DEBRIS PROBLEM
Vera Mayorova, Bauman Moscow State Technical University, Russian Federation

14:15-14:25 IAC-18.A6.IP.46
AN IMPROVED SYNCHRONIZED ORBIT DETERMINATION METHOD BASED ON DISTRIBUTED STAR SENSORS
FEI FENG, Academy of Equipment, China

14:25-14:35 IAC-18.B1.IP.35
NEXT GENERATION RADAR SERVICES: ACTIONABLE INFORMATION FOR DECISION MAKING
Pierre-Alexis Joumel, Airbus Defence and Space, Germany

14:35-14:45 IAC-18.B2.IP.17
AN ANTENNA ARRAY-BASED RADIO NAVIGATION SIGNAL'S DIFFERENTIAL CARRIER TRACKING ALGORITHM
Shunxiao Wu, Tianjin communications and Broadcasting Group Co., Ltd, China

SCREEN # 14

13:15-13:25 IAC-18.B1.IP.1
REVIEWS AND PROSPECT OF INTERNATIONAL ELECTROMAGNETIC SEISMIC SATELLITE
ZHANG Xiaopeng, China Academy of Space Technology (CAST), China

13:25-13:35 IAC-18.B1.IP.3
EARTHCARE PROCESSING FACILITY AND EARTHCARE L2 TESTBED - A SYNERGETIC SETUP TO SUPPORT SCIENTIFIC ALGORITHM DEVELOPMENT
Bernard Pruin, Werum Software & Systems AG, Germany

13:35-13:45 IAC-18.B1.IP.5
THE CHALLENGE OF INTEGRATING AND ALIGNING A NEW TYPE OF EO INSTRUMENT: THE ENMAP HYPERSPECTRAL IMAGER
Aurelien GODENIR, OHB System AG - Oberpfaffenhofen, Germany

13:45-13:55 IAC-18.B1.IP.7
ASSESSMENT OF WIND SHADOWS BEHIND OFFSHORE WIND PARKS WITH ANTENNA BEAM PATTERN COMPENSATED SENTINEL-1 DATA
Sven Jacobsen, DLR (German Aerospace Center), Germany

13:55-14:05 IAC-18.B1.IP.9
METEOSAT THIRD GENERATION – DEVELOPMENT OF THE COMMON SATELLITE PLATFORM
Andrea Jaime, OHB System AG - Munich, Germany

14:05-14:15 IAC-18.B1.IP.10
ASSESSING THE MATURITY OF EO ACTIVITIES AT NATIONAL LEVEL
Eleftherios Mamais, National Observatory Of Athens, Greece

14:15-14:25 IAC-18.B1.IP.13
COPERNICUS CLIMATE CHANGE SERVICE (C3S) GLOBAL SATELLITE OBSERVATIONS OF ATMOSPHERIC CARBON DIOXIDE AND METHANE
Michael Buchwitz, University of Bremen, Germany

14:25-14:35 IAC-18.B1.IP.14
SATELLITE REMOTE SENSING IN ASEAN : A CRITICAL REVIEW OF NATIONAL DATA POLICIES
Quentin Verspieren, University of Tokyo, Japan

14:35-14:45 IAC-18.B1.IP.19
MACHINE LEARNING APPROACHES TO CLASSIFY MARITIME OBJECTS FROM SPACE RADAR
Domenico Velotto, German Aerospace Center (DLR), Bremen, Germany, Germany

SCREEN # 15

13:15-13:25 IAC-18.B1.IP.21
EARTH INSPECTOR: RECONCILING SPACE TECHNOLOGIES AND AGRICULTURAL APPROACHES TO TACKLE CLIMATE CHANGE
Sathesh Raj, World Space Week Association, Malaysia

13:25-13:35 IAC-18.B1.IP.22
AUTONOMOUS SATELLITE DATA MONITORING TECHNIQUES APPLIED TO DELFI-C3 TELEMETRY
Alessandro Saetta, Politecnico di Milano, Italy

13:35-13:45 IAC-18.B1.IP.23
SPATIAL-TEMPORAL EPIDEMIOLOGY STUDY OF THE CHIKUNGUNYA DISEASE IN BOLIVIA
Natalia Indira Vargas-Cuentas, Beihang University (BUAA), China

13:45-13:55 IAC-18.B1.IP.26
CHANGE DETECTION OF THE SUNDARBAN PART OF BANGLADESH USING REMOTE SENSING AND GIS TECHNIQUES WITH MACHINE LEARNING ALGORITHMS
Mitesh Chakma, BRAC University, Bangladesh

13:55-14:05 IAC-18.B1.IP.28
TARGETS FOR SATELLITE-BASED EMERGING DISEASE SURVEILLANCE: ECOLOGICAL CHANGE AND ZOONOTIC BAT VIRUSES
Samuel Malloy, The Ohio State University, United States

14:05-14:15 IAC-18.B1.IP.29
THREE-SUPER PLATFORM FOR HIGH-EFFICIENCY, HIGH-VALUE EARTH OBSERVATION MISSION
Ming Li, China Academy of Space Technology (CAST), China

14:15-14:25 IAC-18.B1.IP.31
COUPLED ORBITAL AND RADIOMETRIC PERFORMANCE SIMULATION OF THE FORMATION FLIGHT INTERFEROMETRIC RADIOMETER FOR GEOSTATIONARY ATMOSPHERIC SOUNDING
Ahmed Kiyoshi Sugihara El Maghraby, University of Southampton, United Kingdom

14:25-14:35 IAC-18.B1.IP.33
OHB FUTURE EARTH OBSERVATION SPACEBORNE MISSIONS:
Overview and current status
Sebastien Tailhades, OHB System, Germany

14:35-14:45 IAC-18.B1.IP.34
MAXIMIZING DATA THROUGHPUT IN EARTH OBSERVATION SATELLITE TO GROUND TRANSMISSION BY EMPLOYING A FLEXIBLE HIGH DATA RATE TRANSMITTER OPERATING IN X-BAND AND KA-BAND
Philipp Wertz, Tesat-Spacecom GmbH & Co. KG, Germany

SCREEN # 16

13:15-13:25 IAC-18.B2.IP.2
ADVERTISING (COMMUNICATION) IN SPACE AS BUSINESS START-UP
Oleg Aleksandrov, Private individual www.oleg.space, United States

13:25-13:35 IAC-18.B2.IP.5
DEVELOPMENT OF A RADIAL STRAP-ON ANTENNA FOR A SUBORBITAL SOUNDING ROCKET
Hamed Gamal, SpaceForest Ltd., Poland

13:35-13:45 IAC-18.B2.IP.6
MAKERSPACES AND CROWDFUNDING FOR ESA SATELLITE COMMUNICATIONS
Frank Zeppenfeldt, European Space Agency (ESA), The Netherlands

13:45-13:55 IAC-18.B2.IP.7
MICROSATELLITE NAVIGATION SYSTEM DESIGN BASED ON 21-CENTIMETER SPECTRAL LINE
Shengchang LAN, Aalto University, Finland

13:55-14:05 IAC-18.B2.IP.8
NAVIGATION PERFORMANCE ANALYSIS FOR LUNAR PROBE BASED ON SVLBI DEVELOPED BY NAVIGATION CONSTELLATION
Xinyuan Lu, National Key Laboratory of Aerospace Flight Dynamics,Northwestern Polytechnical University,Xi'an, China

14:05-14:15 IAC-18.B2.IP.9
NEW DEVELOPMENT OF DIGITAL BEAM FORMING FOR SATELLITE COMMUNICATIONS
Gou Tamura, Kobe University, Japan

14:15-14:25 IAC-18.B2.IP.10
RESEARCH ON AUTONOMOUS TASK SCHEDULING OF FORMATION FLYING SATELLITES FOR EARTH OBSERVATION
Zhiming Chen, Nanjing University of Aeronautics and Astronautics, China

14:25-14:35 IAC-18.B2.IP.12
THE MULTILEVEL DYNAMIC BANDWIDTH ALLOCATION AND PERFORMANCE ANALYSIS OF SPACEBORNE NETWORK BASED ON SPACEFIBRE
Rui Xiong, Beihang University (BUAA), China

14:35-14:45 IAC-18.B2.IP.14
THE HIGH SENSITIVITY GPS L1 DECODING METHOD BASED ON MOON NAVIGATION MISSION
Jia Tian, China Academy of Space Technology (Xi'an), China

SCREEN # 17

13:15-13:25 IAC-18.B3.IP.2
MULTISENSORY GARMENTS FOR OPTIMAL BODY-MIND AWARENESS IN SPACE TRAVEL
Kristin Neidlinger, SENSOREE Therapeutic Biomedia, United States

13:25-13:35 IAC-18.B3.IP.3
BAKE IN SPACE: TO BOLDLY BAKE WHERE NOBODY HAS BAKED BEFORE
Ryan Laird, Bake in Space, United Kingdom

13:35-13:45 IAC-18.B3.IP.5
HABITATOS - OPEN SOURCE OPERATING SYSTEM FOR EXTRATERRESTRIAL HABITATS
Matt Harasymczuk, ESA / Polish Air Force Academy, Poland

13:45-13:55 IAC-18.B3.IP.6
CIMON: A VISUAL NAVIGATION SYSTEM FOR FLYING THROUGH THE INTERNATIONAL SPACE STATION
Ralf Regele, Airbus DS GmbH, Germany

13:55-14:05 IAC-18.B3.IP.9
THE RVS3000 AND RVS3000-3D LIDAR SENSORS FOR RENDEZVOUS AND DOCKING MISSIONS
Sebastian Dochow, Jena-Optronik GmbH, Germany

14:05-14:15 IAC-18.B3.IP.11
BRAIN COMPUTER INTERFACE - AN EMERGING TECHNOLOGY TOWARDS FUTURE SPACEFLIGHT MISSIONS
Sonal Baberwal, International Space University (ISU), France

14:15-14:25 IAC-18.B3.IP.13
A REDEFINED ASTRONAUT SELECTION PROCESS FOR LOW COST COMMERCIAL SPACE FLIGHT MISSIONS
Carolina Gomez Rodriguez, University of Bremen, Germany

14:25-14:35 IAC-18.B3.IP.14
PROPOSAL FOR A FLOATING HABITAT DESIGN FOR MANNED MISSIONS TO VENUS
James Lai, McMaster University, Canada

14:35-14:45 IAC-18.B2.IP.20
FPGA-BASED MULTI-SENSOR RELATIVE NAVIGATION IN SPACE: PRELIMINARY ANALYSIS IN THE FRAMEWORK OF THE I3DS H2020 PROJECT
Antonio Fulvio Scannapieco, Cranfield University, United Kingdom

SCREEN # 18

13:15-13:25 IAC-18.B6.IP.1
BREAKTHROUGHS IN THE AUTOMATED TESTING USING MAN-MACHINE INTERFACE OF GROUND SEGMENT SOFTWARE
Mário Pinto, Etamax Space GmbH, Germany

13:25-13:35 IAC-18.B6.IP.2
SPACECENTRE-2018: AN ADVANCED PWA-BASED GROUND STATION APPLICATION FROM FLATSAT TESTING TO MISSION OPERATIONS
DAN FENG, National University of Singapore, Singapore, Republic of

13:35-13:45 IAC-18.B6.IP.3
HUMAN PREDICTIVE SIMULATION FOR EARTH AND SPACE EXPLORATION
Tatiana Volkova, Ecole Polytechnique Fédérale de Lausanne (EPFL), Swiss Space Center (SSC), Switzerland

13:45-13:55 IAC-18.B6.IP.4
Secure Model-Based Systems Engineering for CubeSats
Umesh Anilchandra Bhat, Estonian Student Satellite Foundation (ESTCube), Estonia

13:55-14:05 IAC-18.B6.IP.5
OPTIMIZING LAUNCH PREPARATIONS OF A SUBORBITAL ROCKET
Hamed Gamal, SpaceForest Ltd., Poland

14:05-14:15 IAC-18.C1.IP.36
THE MISSION'S DESIGN OF A SOLAR SAIL SPACECRAFT TO THE NEAREST CIRCUMSOLAR SPACE, BASED ON A LOCALLY-OPTIMAL CONTROL LAWS
Olga Starinova, Samara National Research University, Russian Federation

14:15-14:25 IAC-18.C1.IP.37
HOW TO SEND A SIGNAL TO FIXED GROUND ANTENNAS FROM A NON-GEOSTATIONARY SATELLITE
Dominik Quantius, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

14:25-14:35 IAC-18.C1.IP.38
PROBA-3 MISSION: IN ORBIT DEMONSTRATION OF A HIGH PERFORMANCE RELATIVE POSITION AND ATTITUDE CONTROL
Daniel Serrano, SENER Ingenieria y Sistemas, S.A., Spain

14:35-14:45 IAC-18.C1.IP.39
COORDINATED CAPTURE OF A PASSIVE SPACE OBJECT USING AUGMENTED STATE ESTIMATION AND NEURAL NETWORKS
Emily Gleeson, Ryerson University, Canada

SCREEN # 19

13:15-13:25 IAC-18.C1.IP.1
WAVE-BASED MOTION CONTROL OF FLEXIBLE SPACE SYSTEMS
Prof.William O'Connor, University College Dublin (UCD), Ireland

13:25-13:35 IAC-18.C1.IP.3
MULTISPECTRAL IMAGE PROCESSING FOR NAVIGATION USING LOW PERFORMANCE COMPUTING
Duarte Rondao, Cranfield University, United Kingdom

13:35-13:45 IAC-18.C1.IP.5
VISION BASED STATE ESTIMATION USING A GRAPH-SLAM APPROACH FOR PROXIMITY OPERATIONS NEAR AN ASTEROID
Arunkumar Rathinam, University of New South Wales, Australia

13:45-13:55 IAC-18.C1.IP.8
EVALUATION OF A CAMERA-BASED POSE AND SHAPE RECONSTRUCTION TECHNIQUE FOR AN UNKNOWN TUMBLING TARGET
Renato Volpe, Sapienza University of Rome, Italy

13:55-14:05 IAC-18.C1.IP.9
HIGHLY ACCURATE GUIDANCE ALGORISM FOR LANDING ON A PLANET WITH GRAVITY
Toyonori Kobayakawa, Mitsubishi Heavy Industries, Ltd., Japan

14:05-14:15 IAC-18.C1.IP.10
THE ALDRIN CYCLER IMPROVED BY THE LORENTZ FORCE
Florence Duveiller, Georgia Institute of Technology, Atlanta, United States

14:15-14:25 IAC-18.C1.IP.11
GRACE ACCELEROMETER CALIBRATION BY HIGH PRECISION NON-GRAVITATIONAL FORCE MODELLING AND ITS VALIDATION
Florian Wöske, Center of Applied Space Technology and Microgravity, Germany

14:25-14:35 IAC-18.C1.IP.13
CONTROL OF 6DOF SPACECRAFT HOVERING ABOUT ASTEROIDS WITHOUT VELOCITY MEASUREMENTS
Haichao Gui, Beihang University, China

14:35-14:45 IAC-18.C1.IP.14
RELATIVE STATE MEASUREMENT OF A NON-COOPERATIVE SPACECRAFT FOR FINAL APPROACHING STAGE OF ON-ORBIT SERVICING USING CONTOUR FEATURES
Yunhua Wu, Nanjing University of Aeronautics and Astronautics, China

SCREEN # 20

13:15-13:25 IAC-18.C1.IP.15
CHAOTIC MOTIONS OF TETHERED TUG-DEBRIS SYSTEM WITH FUEL RESIDUALS
Vladimir S. Aslanov, Samara National Research University, Russian Federation

13:25-13:35 IAC-18.C1.IP.17
DISTRIBUTED COORDINATION CONTROL FOR MULTIPLE SPACECRAFT WITH COUPLED ATTITUDE AND ORBIT DYNAMICS UNDER THE DIRECTED GRAPH
Ma Weihua, National Key Laboratory of Aerospace Flight Dynamic, Northwestern Polytechnical University, China

13:35-13:45 IAC-18.C1.IP.18
DUAL QUATERNION BASED RELATIVE NAVIGATION FOR SPACECRAFT PROXIMITY OPERATION
Yunju Na, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

13:45-13:55 IAC-18.C1.IP.19
INVERSE-DYNAMICS PARTICLE SWARM OPTIMIZATION FOR REAL TIME OPTIMAL CONTROL: CHALLENGES AND OPPORTUNITIES
Dario Spiller, Sapienza University of Rome, Italy

13:55-14:05 IAC-18.C1.IP.20
SPACE-ORIENTED NAVIGATION SOLUTIONS WITH INTEGRATED SENSOR-SUITE: THE I3DS H2020 PROJECT
Antonio Fulvio Scannapieco, Cranfield University, United Kingdom

14:05-14:15 IAC-18.C1.IP.21
INVESTIGATION INTO THE CONTROLLABILITY OF UNDERACTUATED MAGNETICALLY STABILIZED SPACECRAFT
Mike Alger, Ryerson University, Canada

14:15-14:25 IAC-18.C1.IP.22
END-OF-LIFE DISPOSAL DESIGN FOR SPACECRAFT AT LIBRATION POINTS ORBITS AND AN INTERPRETATION OF THEIR PROBABILITY OF EARTH RETURN
Greta De Marco, Politecnico di Milano, Italy

14:25-14:35 IAC-18.C1.IP.23
HIGHER-ORDER CAYLEY TRANSFORM FOR RELATIVE POSE PARAMETERIZATION OF SPACECRAFT
Daniel Condurache, Technical University of Iasi, Romania

14:35-14:45 IAC-18.C1.IP.25
SENTINEL-3 TANDEM: FROM CONCEPT TO IMPLEMENTATION
Berthyl Duesmann, ESA - European Space Agency, The Netherlands

SCREEN # 21

13:15-13:25 IAC-18.C1.IP.26
THE BOREA PROJECT: A QUADROTOR UAV CRADLE-TO-GRAVE DESIGN FOR SPACE GNC PROTOTYPING AND TESTING
Luigi Colangelo, Politecnico di Torino, Italy

13:25-13:35 IAC-18.C1.IP.28
ORBITAL AND FORMATION OPTIMIZATION FOR SPACE GRAVITATIONAL WAVES OBSERVATORY MISSION
Mingtao Li, 1: National Space Science Center, Chinese Academy of Sciences; 2:University of Chinese Academy of Sciences, China

13:35-13:45 IAC-18.C1.IP.29
NEXT STEPS FOR THE CRYOSAT-2 MISSION: IMPROVING SEA-ICE ESTIMATES IN JOINT OPERATIONS WITH THE ICESAT-2 SPACECRAFT.
Javier Sanchez, ESA - European Space Agency, Germany

13:45-13:55 IAC-18.C1.IP.30
Missions for Asteroid Insertion into Earth-Mars Cycler
Francesco Simeoni, , Italy

13:55-14:05 IAC-18.C1.IP.31
MISSION DESIGN AND ANALYSIS FOR MARS AND PHOBOS MISSIONS VIA LUNAR AND MARS-PHOBOS DISTANT RETROGRADE ORBITS
Davide Conte, The Pennsylvania State University, United States

14:05-14:15 IAC-18.C1.IP.32
FUEL-OPTIMAL TRAJECTORIES NEAR LAGRANGE POINTS
Florent Bréhard, LAAS-CNRS, France

14:15-14:25 IAC-18.C1.IP.33
ADVANCED IN-FLIGHT RESULTS FROM THE GPS RECEIVER ON SMALLGEO
Nils Neumann, OHB System AG-Bremen, Germany

14:25-14:35 IAC-18.C1.IP.34
ADVANCED APPROACH BASED ON CONVEX PROGRAMMING FOR MARS POWERED
descent guidance
Kazuya Echigo, Department of Engineering ,The University of Tokyo , Japan

14:35-14:45 IAC-18.C1.IP.35
EXTENDED REACTIONLESS WORKSPACE MANIPULATOR THROUGH REACTION WHEELS
Alessandro Tringali, Space Mechatronic Systems Technology Laboratory, University of Strathclyde, United Kingdom

SCREEN # 22

13:15-13:25 IAC-18.C2.IP.1
EXPERIMENTAL STUDIES ON AEROTHERMAL FLUID-STRUCTURE INTERACTION WITH PLASTIC DEFORMATION
Dennis Daub, DLR (German Aerospace Center), Germany

13:25-13:35 IAC-18.C2.IP.2
SPACE SYSTEMS STRUCTURAL ANALYSES FROM MODAL PARAMETERS USING A PYTHON DEVELOPED TOOLSET, AND ADDITIONAL PRE/POST-PROCESSING FEATURES
José Luis Gasent-Blesa, University of Valencia, Spain

13:35-13:45 IAC-18.C2.IP.3
GRAPHENE FUNCTIONALIZATION USING TRANSITION METAL OXIDE FOR ENHANCING THE BIFUNCTIONAL CATALYTIC ABILITY OF NANOPARTICLES
Simranjit Grewal, The National AeroSpace Training And Research Center (THE NASTAR CENTER), United States

13:45-13:55 IAC-18.C2.IP.5
FREE VIBRATIONS OF ULTRATHIN DEPLOYABLE BOOMS FABRICATED WITH NANO-MODIFIED EPOXY MATRIX
Susanna Laurenzi, Sapienza University of Rome, Italy

13:55-14:05 IAC-18.C2.IP.6
CHALLENGES IN THE DESIGN OF ULTRALIGHT MECHANISMS FOR DEEP SPACE EXPLORATION - BASED ON RPWI INSTRUMENTS FOR ESA JUICE MISSION
Ewelina Ryszawa, Astronika, Poland

14:05-14:15 IAC-18.C2.IP.7
DEFIANT: A SMALL MASS-PRODUCIBLE MICROSATELLITE PLATFORM FOR DEMANDING APPLICATIONS UNDER EXTREME COST AND SIZE CONSTRAINTS
Benoit Larouche, Space Flight Laboratory, University of Toronto, Canada

14:15-14:25 IAC-18.C2.IP.12
CARBON FIBER REINFORCED BENZOXAZINE FEATURING SHAPE MEMORY BEHAVIOR FOR TEMPERATURE-DEPENDENT SELF-DEPLOYING SPACECRAFT STRUCTURES
Hannes Schäfer, University of Bremen, Germany

14:25-14:35 IAC-18.C2.IP.13
BIO-MIMICRY: A POSSIBLE NATURAL SOLUTION TO DESIGN SUSTAINABLE HABITAT ON MARS
Avishek Ghosh, Loughborough University, United Kingdom

14:35-14:45 IAC-18.C2.IP.16
DEVELOPMENTAL VERIFICATION OF THE LAUNCH OF CUBESAT FORMAT SATELLITES FROM SMALL SPACECRAFTS
Victor Leonov, Bauman Moscow State Technical University, Russian Federation

SCREEN # 23

13:15-13:25 IAC-18.C2.IP.18
COMBINING ADDITIVE MANUFACTURING AND BIOMIMETICS FOR THE OPTIMIZATION OF SATELLITE STRUCTURES
Daniel Vogel, Technische Universität München, Germany

13:25-13:35 IAC-18.C2.IP.19
CORROSION CHEMICAL KINETICS AND EROSION EFFECTS DUE TO ATOMIC OXYGEN EXPOSURE OF SOLAR ARRAYS FOR NANO-SATELLITES APPLICATIONS.
Andrea Delfini, Sapienza University of Rome, Italy

13:35-13:45 IAC-18.C2.IP.20
FABRICATION AND CHARACTERISTIC OF BLACK BODY SYSTEM WITH NANO-STRUCTURED NEEDLE FOR ON-BOARD CALIBRATION OF IMAGE SENSOR
Seolhui Hwang, Hanbat National University, Korea, Republic of

13:45-13:55 IAC-18.C2.IP.21
MOISTURE INDUCED COMBUSTION AND FIRE SAFETY
Anirudh Nautiyal, SRM University, kattankulathur, chennai, INDIA, India

13:55-14:05 IAC-18.C2.IP.25
DESIGN STRUCTURE, DYNAMIC STRUCTURE SIMULATION AND THERMAL SIMULATION OF SURYA SATELLITE-1
Hery Steven Mindarno, , Indonesia

14:05-14:15 IAC-18.C2.IP.26
A MULTI-SCALE METHOD OF MECHANICAL AND THERMAL COUPLING ANALYSIS FOR THERMAL PROTECTION STRUCTURE
Jin Yin, China Academy of Launch Vehicle Technology (CALT), China

14:15-14:25 IAC-18.C2.IP.31
ACTIVE VIBRATION CONTROL OF FLEXIBLE APPENDAGES OF SPACECRAFT IN DURING ATTITUDE MANEUVER
Zelin Wang, Dalian University of Technology, China

14:25-14:35 IAC-18.C2.IP.32
SIMULATION CALCULATION METHOD AND TEST VERIFICATION OF THE AXIAL CONNECTION STIFFNESS OF THE CLAMP BAND DEVICE
Shipeng KANG, Aerospace System Engineering Shanghai, China, China

14:35-14:45 IAC-18.C2.IP.33
THERMO STRUCTURAL ANALYSIS OF SOLID ROCKET SCARFED NOZZLE WITH COMPOSITE ABLATIVE LINERS FOR CREW ESCAPE SOLID MOTOR
Paul Murugan J, Indian Space Research Organization (ISRO), India

SCREEN # 24

13:15-13:25 IAC-18.C3.IP.2
ADVANCED POWER SYSTEM ARCHITECTURE FOR FUTURE SPACECRAFT: CONCEPT AND HIGH-LEVEL DESIGN
Christian Demitri, , Germany

13:25-13:35 IAC-18.C3.IP.3
LUNAR BASED SOLAR ENERGY PRODUCTION AND TRANSFER THROUGH LASER MEDIUM
Alev Soenmez, LunarVis, Germany

13:35-13:45 IAC-18.C3.IP.5
TOWARDS TO LARGER CAPACITY OF EPS FOR CUBESAT: EXPERIENCE FROM STAR OF AOXIANG AND ISSUES FOR FUTURE DEVELOPMENT
Peng Li, Shaanxi Engineering Laboratory for Microsatellites, Northwestern Polytechnical University, China

13:45-13:55 IAC-18.C3.IP.6
USING ARTIFICIAL NEURAL NETWORKS TO MODEL DIFFUSION IN SOLID STATE ELECTROLYTES
Karun Kumar Rao, University of Houston, United States

13:55-14:05 IAC-18.C3.IP.10
RESEACH ON HYBRID PEAK POWER TRACKING TOPLOGY AND STRATEGY FOR SATELLITE POWER SYSTEM
Longlong Zhang, Shandong Aerospace Electro-technology Institute, China Academy of Space Technology, China

14:05-14:15 IAC-18.C2.IP.34
A STUDY ON IMPACTS OF HIGH ENTHALPY EFFECT IN DESIGNING ARC JET WIND TUNNEL EXPERIMENTS FOR HIGH TEMPERATURE THERMAL PROTECTION MATERIAL
Xun Wang, CALT,CASC, China

14:15-14:25 IAC-18.C2.IP.35
DYNAMIC MODELING AND ROBUST CONTROL FOR A FREE-FLYING FLEXIBLE-LINK AND FLEXIBLE-JOINT SPACE MANIPULATOR WITH AN ELASTIC BASE
xiaoyan yu, Fuzhou University, China

14:25-14:35 IAC-18.C2.IP.37
ULTRALIGHT PBO COMPOSITE OVERWRAPPED PRESSURE VESSELS FOR LUNAR PROBES
Fei Yan, Shanghai Institute of Space Propulsion, China

14:35-14:45 IAC-18.C4.IP.53
A NEW SEMI-ANALYTICAL MODEL FOR PRELIMINARY ESTIMATION OF ION NUMBER DENSITY IN ELECTRIC THRUSTER PLUME
Andrea Binci, Sapienza University of Rome, Italy

SCREEN # 25

13:15-13:25 IAC-18.C4.IP.1
AQUASONIC II – HYBRID PROPULSION ANALYSIS FOR 3D-PRINTED FUEL GRAINS
Christian Dierken, Hochschule Bremen, Germany

13:25-13:35 IAC-18.C4.IP.2
CONCEPTUAL DESIGN OF A HYBRID SOUNDING ROCKET TO REACH A TARGET ALTITUDE
Jeongmoo Huh, Queen Mary University of London, United Kingdom

13:35-13:45 IAC-18.C4.IP.6
DESIGN AND EXPERIMENTAL ANALYSIS OF HYBRID ROCKET ENGINE ADDITIVELY MANUFACTURED COMPLEX PORT GEOMETRIES
Alec Yenawine, University of Miami, United States

13:45-13:55 IAC-18.C4.IP.7
EFFECT OF PYROLYSIS AND OXIDATION OF N-DECANE ON THE HEAT AND MASS TRANSFER CHARACTERISTICS OF HYDROCARBON FUELED SUPERSONIC FILM COOLING
Jingying Zuo, Harbin Institute of Technology, China

13:55-14:05 IAC-18.C4.IP.8
CONTROL SYSTEM OF LE-9 ENGINE USING ELECTRIC DRIVE VALVES
Yusuke Funakoshi, Japan Aerospace Exploration Agency (JAXA), Japan

14:05-14:15 IAC-18.C4.IP.12
LASER ABLATION PROPULSION LAUNCH SYSTEM (LAPLAS) AS A BASIS FOR NEW ACCESS-TO-SPACE PARADIGM.
IOURI PIGULEVSKI, , Switzerland

14:15-14:25 IAC-18.C4.IP.13
EFFECT OF PRESTRAIN ON UNIAXIAL TENSILE BEHAVIOR OF HTPB COMPOSITE PROPELLANT
Jiming CHENG, Northwestern Polytechnical University, China

14:25-14:35 IAC-18.C4.IP.14
A SIMPLIFIED CHEMICAL REACTION MECHANISM FOR TWO-COMPONENT RP-3 KEROSENE SURROGATE FUEL AND ITS VERIFICATION
Yingwen YAN, Nanjing University of Aeronautics and Astronautics, China

14:35-14:45 IAC-18.C4.IP.17
EXPERIMENTAL INVESTIGATION OF INJECTORS DESIGN AND THEIR EFFECTS ON 1KN PERFORMANCE HYBRID ROCKET MOTOR
Mohammed Bouziane, Royal Military Academy, Belgium

SCREEN # 26

13:15-13:25 IAC-18.C4.IP.18
ADDITIVE MANUFACTURING TECHNOLOGIES APPLIED TO SPACE PROPULSION
David Ritz, Sitael Spa, United States

13:25-13:35 IAC-18.C4.IP.19
EXPERIMENTAL STUDIES OF THE 150N HAN-BASED MONOPROPELLANT ATTITUDE CONTROL THRUSTER
Guo Manli, Shanghai Institute of Space Propulsion, China

13:35-13:45 IAC-18.C4.IP.22
DESIGN AND FABRICATION OF MEMS THRUST MEASUREMENT SYSTEM FOR PERFORMANCE EVALUATION OF MEMS THRUSTER
Youngsuk Ryu, Hanbat National University, Korea, Republic of

13:45-13:55 IAC-18.C4.IP.26
GELLED PROPELLANT ROCKET MOTOR AND GAS GENERATOR TECHNOLOGY IN GERMANY - AN OVERVIEW -
Karl Wieland Naumann, Bayern Chemie, Germany

13:55-14:05 IAC-18.C4.IP.28
ARCLIGHT - A LOW COST PLUG-AND-PLAY RIT ELECTRIC PROPULSION SYSTEM
Philipp Bauer, ArianeGroup, Germany

14:05-14:15 IAC-18.C4.IP.31
RESULTS OF FIELD-EMISSION CATHODE OPERATION ON THE H-II TRANSFER VEHICLE
Yasushi Ohkawa, JAXA, Japan

14:15-14:25 IAC-18.C4.IP.32
CONVOLUTIONAL NEURAL NETWORK BASED COMBUSTION MODE CLASSIFICATION FOR CONDITION MONITORING IN A SUPERSONIC COMBUSTOR
Xiaobin Zhu, National University of Defense Technology, China

14:25-14:35 IAC-18.C4.IP.34
ELECTRIC PROPULSION SYSTEM BASED ON THE AIR-BREATHING RADIO-FREQUENCY ION THRUSTER USING THE UPPER ATMOSPHERE GASES AS PROPELLANT
Svyatoslav Gordeev, Research Institute of Applied Mechanics and Electrodynamics (RIAME), MAI, Russian Federation

14:35-14:45 IAC-18.C4.IP.35
STATUS OF ORION EUROPEAN SERVICE MODULE PROPULSION SUBSYSTEM QUALIFICATION TESTING
Benedikt Determann, ArianeGroup, Germany

SCREEN # 27

13:15-13:25 IAC-18.C4.IP.39
DEVELOPMENT OF AN ELECTRO THERMAL CUBESAT PULSED PLASMA THRUSTER
James Bultitude, International Space University (ISU), United States

13:25-13:35 IAC-18.C4.IP.41
PLUME ANALYSIS OF ADN GREEN PROPELLANT THRUSTER FOR SATELLITE ATTITUDE CONTROL
Kyun Ho Lee, Sejong University, Korea, Republic of

13:35-13:45 IAC-18.C4.IP.42
EXPERIMENTAL INVESTIGATIONS OF PLUME CHARACTERISTICS OF THE HET-40 HALL THRUSTER BY LANGMUIR PROBE
JIA LIU, Shanghai Institute of Space Propulsion, China

13:45-13:55 IAC-18.C4.IP.43
EFFECT OF NOZZLE GEOMETRY ON COUNTERFLOW JETS FOR DRAG REDUCTION OF A HIGH SPEED VEHICLE
Jaecheong Lee, Chungnam National University, Korea, Republic of

13:55-14:05 IAC-18.C4.IP.44
3D IMAGING OF BURNING ALUMINUM PARTICLES IN SOLID PROPELLANT USING DIGITAL INLINE HOLOGRAPHY

Bingning JIN, Northwestern Polytechnical University, China

14:05-14:15 IAC-18.C4.IP.45
LOX/LH2 ENGINE DEMO PLATFORM
Sébastien PRIOTTO, ArianeGroup, France

14:15-14:25 IAC-18.C4.IP.48
DEVELOPMENT AND TESTING OF AN ADDITIVE LAYERED MANUFACTURED NOZZLE FOR A COLD GAS MICRO THRUSTER
Abdelfattah Mostafa, Omnidea-RTG GmbH, Germany

14:25-14:35 IAC-18.C4.IP.50
DEVELOPMENT OF THE MEMS-BASED NOZZLE USING DRIE OF TAPERED HOLE TECHNOLOGY FOR CUBE SATELLITE
GIWON LA, Hanbat National University, Korea, Republic of

14:35-14:45 IAC-18.C4.IP.52
PREDICTION AND VALIDATION OF THE CATALYTIC DECOMPOSITION OF HYDROGEN PEROXIDE IN DUAL-CATALYTIC BED
Sangwoo Jung, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

SCREEN # 28

13:15-13:25 IAC-18.D1.IP.1
MULTI-ASSET SYSTEM DESIGN METHODOLOGY FOR EARTH OBSERVATION
Simone Flavio Rafano Carnà, OHB System AG-Bremen, Germany

13:25-13:35 IAC-18.D1.IP.2
STUDY ON MULTIPLY-LEVEL MODEL FOR SOLID ROCKET MOTOR: CONSTRUCTION AND DATA STRUCTURE
Dong Yao, The 41st Institute of the Fourth Academy, China Aerospace Science and Technology Corporation (CASC), China

13:35-13:45 IAC-18.D1.IP.3
SOFTWARE PACKAGE DESIGN FOR PARTIAL AUTOMATIZATION OF THE DESIGN PROCESS OF RE-ENTRY INTERPLANETARY MODULES
Victor Leonov, Bauman Moscow State Technical University, Russian Federation

13:45-13:55 IAC-18.D1.IP.5
A PRELIMINARY DESIGN OF A MISSION TO TRITON: A CONCURRENT ENGINEERING APPROACH
Luciano Pollice, Sapienza University of Rome, Italy

13:55-14:05 IAC-18.D1.IP.6
THE VIRTUAL TESTBED APPROACH TOWARDS MODULAR SATELLITE SYSTEMS
Tobias Osterloh, RWTH Aachen University, Germany

14:05-14:15 IAC-18.D1.IP.8
DATA EXCHANGE BETWEEN SPACE ENVIRONMENT ANALYSIS TOOLS USING THE NEUTRAL STEP PROTOCOL
Jewel Pervez, Etamax Space GmbH, Germany

14:15-14:25 IAC-18.D1.IP.9
CONCEPTUAL DESIGN OF SPACE MECHANISM BASED ON MODEL BASED ENGINEERING AND MODEL BASED SYSTEMS ENGINEERING – A SET OF CONCISE METHODS TO INCREASE ENGINEERING EFFICIENCY
Manolo Omiciuolo, OHB System AG - Oberpfaffenhofen, Germany

14:25-14:35 IAC-18.D1.IP.12
SYSTEM CONCURRENT ENGINEERING OF A PEOPLE TRACKING SATELLITE, A CASE STUDY
Elisa Itogawa, National Institute for Space Research - INPE , Brazil

14:35-14:45 IAC-18.D1.IP.17
SCRUM METHODOLOGY IN AEROSPACE PROJECTS
Daria Stepanova, German Orbital Systems GmbH, Germany

SCREEN # 29

13:15-13:25 IAC-18.D1.IP.19
AN IMPROVED MULTIDISCIPLINARY OPTIMIZATION APPROACH FOR SATELLITE DESIGN
Shuai Li, National Key Laboratory of Aerospace Flight Dynamics, Northwestern Polytechnical University, China

13:25-13:35 IAC-18.D1.IP.20
INNOVATIVE ARCHITECTURE OPTIMIZATION APPROACH FOR HIGHLY RELIABLE SATELLITE ATTITUDE CONTROL
Kai Höfner, Technische Universität Braunschweig, Institute of Space Systems, Germany

13:35-13:45 IAC-18.D1.IP.24
SYSTEM DESIGN OF UPPER STAGE IN KSLV-II USED IN KOREAN LUNAR EXPLORATION PROGRAM
Sung Wook Yoon, Moscow Aviation Institute, Russian Federation

13:45-13:55 IAC-18.D1.IP.25
MULTI-FIDELITY DESIGN UNDER UNCERTAINTY FOR THE JAMES WEBB SPACE TELESCOPE
Giuseppe Cataldo, National Aeronautics and Space Administration (NASA), Goddard Space Flight Center, United States

13:55-14:05 IAC-18.D1.IP.26
PREDICTIVE CONTROL OF A SPACE MANIPULATOR THROUGH ERROR EXPECTATION
Alessandro Tringali, Space Mechatronic Systems Technology Laboratory, University of Strathclyde, United Kingdom

14:05-14:15 IAC-18.D1.IP.27
FACILITATORS – FACILITIES FOR TESTING ORBITAL AND SURFACE ROBOTICS BUILDING BLOCKS
Matteo Suatoni, G.M.V. Space and Defence, S.A., Spain

14:15-14:25 IAC-18.D1.IP.29
AN AUTOMATIC MODEL-BASED REQUIREMENT DECOMPOSITION AND VERIFICATION TOOL FOR SPACE MISSION CONCEPT DESIGN
Yuzhu Zhang, National Space Science Center, Chinese Academy of Sciences, China

14:25-14:35 IAC-18.D1.IP.30
PARALLEL, REMOTELY-CONTROLLED ROBOTIC MANIPULATION
Martin Ristov, Ryerson University, Canada

14:35-14:45 IAC-18.D1.IP.31
INTEGRATING HARDWARE DATA INTO SIMULATIONS FOR ATTITUDE CONTROL DESIGN
Srikara Cherukuri, Delft University of Technology (TU Delft), The Netherlands, The Netherlands

SCREEN # 30

13:15-13:25 IAC-18.D2.IP.1
A NEW THREE-STAGE-TO-ORBIT VEHICLE CONCEPT UTILIZING ROCKET-BASED COMBINED CYCLE PROPULSION
Cong Zhou, School of Astronautics,Northwestern Polytechnical University, China

13:25-13:35 IAC-18.D2.IP.3
MATURITY ASSESSMENT PROCESS FOR USAF NEW ENTRANT LAUNCH SYSTEMS
Jeffrey Michlitsch, The Aerospace Corporation, United States

13:35-13:45 IAC-18.D2.IP.5
TRAJECTORY OPTIMIZATION FOR POWERED DESCENT AND LANDING OF REUSABLE ROCKETS WITH RESTARTABLE ENGINES
Lin Ma, Zhejiang University, China

13:45-13:55 IAC-18.D2.IP.8
ATMOSPHERIC POWERED DESCENT GUIDANCE FOR ROCKETS PRECISION LANDING ON EARTH
Qingzhong Gan, Shanghai Aerospace Control Technology Institute (SACTI), Shanghai Academy of Spaceflight Technology (SAST), China

13:55-14:05 IAC-18.D2.IP.9
DEVELOPMENT OF A SUBORBITAL INEXPENSIVE ROCKET FOR AFFORDABLE SPACE ACCESS
Hamed Gamal, SpaceForest Ltd., Poland

14:05-14:15 IAC-18.D2.IP.11
CFD BASED METHOD FOR MODELING CONVECTION WITHIN THERMAL SYSTEM ANALYSIS TOOLS FOR LAUNCHERS
Christian Wendt, ArianeGroup, Germany

14:15-14:25 IAC-18.D2.IP.12
LAUNCH ENVIRONMENT MEASUREMENT CUBESAT AND LESSONS LEARNED
Arielle Cohen, Cal Poly, SLO, United States

14:25-14:35 IAC-18.D2.IP.15
PERFORMANCE OPTIMIZATION OF THE METHANOL/LOX SOUNDING ROCKET SYSTEMS
Naser Ashknani, Kuwait University, Kuwait

14:35-14:45 IAC-18.D2.IP.16
LOW-COST PROTOTYPE DEVELOPMENT OF A LUNAR MASSDRIVER
Manfred Ehresmann, Institute of Space Systems, Universität Stuttgart, Germany

SCREEN # 31

13:15-13:25 IAC-18.D3.IP.1
INITIAL DESIGN CHARACTERISTICS, TESTING AND PERFORMANCE OPTIMISATION FOR A LUNAR EXPLORATION MICRO-ROVER PROTOTYPE.
Mickaël LAÎNÉ, Tohoku University, Japan

13:25-13:35 IAC-18.D3.IP.2
MULTI-FUNCTIONAL INTERFACE FOR PAYLOAD INTERCONNECTION OF ROBOTIC SYSTEMS IN SPACE
Gonzalo Guerra, SENER Ingenieria y Sistemas, S.A., Spain

13:35-13:45 IAC-18.D3.IP.3
THE NOVEL DOCKING MECHANISM DESIGN OF MODULAR SPACE ROBOT
Dong Yang, Northwestern Polytechnical University;National Key Laboratory of Aerospace Flight Dynamics, China

13:45-13:55 IAC-18.D3.IP.4
FUSED FILAMENT FABRICATION OF POLYCARBONATE COMPONENTS IN A SIMULATED ON-ORBIT ENVIRONMENT
Marshall Quinn, Delft University of Technology (TU Delft), The Netherlands

13:55-14:05 IAC-18.D3.IP.7
h.o.m.e. lab
Alessandro Martucci, Università degli Studi di Napoli "Federico II", Italy

14:05-14:15 IAC-18.C4.IP.56
STRUCTURAL INTEGRITY ANALYSIS OF SRM GRAIN AT LOW TEMPERATURE IGNITION
YAO Dong, The 41st Institute of the Fourth Academy, China Aerospace Science and Technology Corporation (CASC), China

14:15-14:25 IAC-18.D1.IP.32
HIGH-PRECISION SURFACE FORCE MODELLING APPROACH FOR SPACE-BASED FUNDAMENTAL PHYSICS MISSION
Takahiro Kato, ZARM, University of Bremen, Germany

14:25-14:35 IAC-18.D2.IP.17
ORBITAL TRANSFER PERFORMANCE ANALYSIS FOR MOMENTUM EXCHANGE TETHER BASED SPACECRAFT SYSTEM
Feng Zhang, China Academy of Launch Vehicle Technology(CALT), China

14:35-14:45 IAC-18.D2.IP.18
SPACE "FILLING STATION
Sergiy Matviyenko, JSC "RPC "KURS", Ukraine

SCREEN # 32

13:15-13:25 IAC-18.D4.IP.1
SPACE SUSTAINABILITY: OVERCOMING FUTURE SPACE CHALLENGES
Vishwani Aggarwal, University of Petroleum and Energy Studies, India

13:25-13:35 IAC-18.D4.IP.4
SPACE INTERNETWORKING SERVICE BASED ON DTN FOR INTERPLANETARY INTERNET
LONGFEI LI, XI'AN MICROELECTRONICS TECHNOLOGY INSTITUTE, CHINA AEROSPACE SCIENCE AND TECHNOLOGY CORPORATION (CASC), CHINA

13:35-13:45 IAC-18.D4.IP.5
TECHNOLOGIES FOR THE FIRST INTERSTELLAR EXPLORER: BEYOND PROPULSION
Anthony Freeman, JPL, United States

13:45-13:55 IAC-18.D4.IP.6
TETHERED SLINGSHOT MANEUVER IN THE THREE-DIMENSIONAL SPACE
Antonio Prado, National Institute for Space Research - INPE , Brazil

13:55-14:05 IAC-18.D4.IP.7
SCIENTIFIC-SPORTS COMMERCIAL PILOTED EXPEDITION TO VENUS
Oleg Aleksandrov, Private individual www.oleg.space, United States

14:05-14:15 IAC-18.D4.IP.8
MULTI-STAGE SPACE ELEVATOR – THE BENEFITS OF SCALING
John Knapman, , United Kingdom

14:15-14:25 IAC-18.D4.IP.9
COSMIC RADIATION PROTECTION SYSTEM FOR LUNAR HABITATION
Vikrant Sharma, University of Petroleum and Energy Studies, India

14:25-14:35 IAC-18.D4.IP.10
CUBESAT SUNDIVER FOR INTERSTELLAR PRECURSOR MISSIONS
Martin Lades, [unlisted], Germany

14:35-14:45 IAC-18.D4.IP.11
STUDY ON A SMALL-SCALE AND HIGH-PERFORMANCE SPACE ELEVATOR
Xiaowei WANG, China Academy of Launch Vehicle Technology (CALT), China

SCREEN # 33

13:15-13:25 IAC-18.E1.IP.1
HUMAN RESOURCES PROCEDURES FOR THE ADVANCEMENT OF GENDER PARITY IN STUDENT SPACE MISSION PROJECTS
Callie Lissinna, University of Alberta, Canada

13:25-13:35 IAC-18.E1.IP.3
EXPLORING THE POSSIBILITIES TO CREATE SPACE STUDIES IN A COUNTRY WHICH LACKS OF IT
Daniel Szendrei, Hungarian Astronautical Society (MANT), Hungary

13:35-13:45 IAC-18.E1.IP.4
USING ACCESS TO SPACE TO BRING THE 'WHY' BACK TO

EDUCATION AND STEM EFFORTS IN THE CLASSROOM
Carie Lemack, DreamUp, PBC, United States

13:45-13:55 IAC-18.E1.IP.5
EUROPEAN ROVER CHALLENGE – A GIANT LEAP TO THE SPACE SECTOR CAREER
Lukasz Wilczynski, European Space Foundation, Poland

13:55-14:05 IAC-18.E1.IP.12
TWO DECADES OF ARCSSTE-E'S POSTGRADUATE DIPLOMA PROGRAMME: WHAT NEXT?
Oladosu Olakunle, African Regional Center for Space Science and Technology Education in English (ARCSSTE-E), Nigeria

14:05-14:15 IAC-18.E1.IP.14
THE IMPORTANCE OF DESIGN AND BUILD TEST-BED PLATFORM FOR CUBESAT MISSIONS IN THE UAE
Fatema Al Hameli, UAE Space Agency, United Arab Emirates

14:15-14:25 IAC-18.E1.IP.15
Introducing concurrent engineering to space and satellite technology undergraduate course
Adam Dąbrowski, Blue Dot Solutions, Poland

14:25-14:35 IAC-18.E1.IP.18
ON THE ROAD!
Space rock tour with a meteorite hunter
By Cintia Durán
Cintia Durán, , Mexico

14:35-14:45 IAC-18.E1.IP.20
SMALL METEOROLOGICAL ROCKET LAUNCH FOR STUDENT PROJECT PAYLOAD WITH BIO-MATERIAL
Nikolay Mullin, Skolkovo Institute of Science and Technology, Russian Federation

SCREEN # 34

13:15-13:25 IAC-18.D5.IP.2
"HOOPOE NANO-SATELLITES CONSTELLATION (ISRAEL 70)" – A POTENTIAL TEST-BED FOR DEALING WITH SPACE BIG DATA
Yevgeny Tsodikovich, The Open University of Israel, Israel

13:25-13:35 IAC-18.E1.IP.21
EDUCATIONAL PICOSATELLITE TELEMETRY AND DATA DOWNLOAD STATION
Sebastian Tepper, Pontifical Catholic University of Chile, Chile

13:35-13:45 IAC-18.E1.IP.22
BLACKBOX: LOCATABLE CRASH SAFETY DATA STORAGE DEVICE FOR SOUNDING ROCKETS
Marcel Vornholt, Hochschule Bremen, Germany

13:45-13:55 IAC-18.E1.IP.23
ANTENNA DESIGN WITH MEASURING TAPES WORKSHOP
Chloe Mireault-Lecourt, Université de Sherbrooke, Canada

13:55-14:05 IAC-18.E1.IP.25
LOW COST OPEN SOURCE HARDWARE AND SOFTWARE TECHNOLOGIES, INTEGRATED AS A PAYLOAD IN A HIGH ALTITUDE BALLOON, A TOOL FOR STEAM EDUCATION IN PARAGUAY, A CASE STUDY.
Jorge Kurita, , Paraguay

14:05-14:15 IAC-18.E1.IP.26
APPROACHING LATIN AMERICAN TEENAGERS INTO SPACE
Federico Arturo Martinez Espinoza, Space Generation Advisory Council (SGAC), Mexico

14:15-14:25 IAC-18.E1.IP.27
HANDS-ON SPACE EDUCATION WITH REXUS/BEXUS - ROCKET AND BALLOON EXPERIMENTS FOR UNIVERSITY STUDENTS
Kristine Dannenberg, Swedish National Space Board (SNSB), Sweden

14:25-14:35 IAC-18.E1.IP.28
PAVING YOUNG MINDS: AN ENABLER TO REACH OUT
Zaid Shakil, TU Berlin, Germany

14:35-14:45 IAC-18.E1.IP.31
ASTRONOMY TEXTBOOK'S COURSE OUTLINE OF HIGH SCHOOLS FOR LEAST DEVELOPED COUNTRIES
Nebiyu Mohammed, , Ethiopia

SCREEN # 35

13:15-13:25 IAC-18.E3.IP.1
THE STATUS OF THE OPERATIONAL DEBRIS MITIGATION SYSTEMS REGULATORY POLICY: CURRENT ISSUES AND FUTURE PERSPECTIVES
Annamaria Nassisi, Thales Alenia Space Italia, Italy

13:25-13:35 IAC-18.E3.IP.5
PAROS:A TECHNOLOGICAL VIEW OF THE PROBLEM
Angel Cuellar, Eurospace, France

13:35-13:45 IAC-18.E3.IP.7
CURRENT DEVELOPMENTS IN POLISH SPACE LAW
Otylia Trzaskalska-Stroinska, ESA, Belgium

13:45-13:55 IAC-18.E3.IP.8
POTENTIAL CONTRIBUTIONS OF COMMERCIAL ACTORS TO SPACE EXPLORATION
Clelia Iacomino, European Space Policy Institute (ESPI), Austria

13:55-14:05 IAC-18.E3.IP.9
TOWARD NEW INTERNATIONAL STATES' CONDUCT IN REGISTERING SPACE OBJECTS
TATIANA VIANA, Sapienza University of Rome, Italy

14:05-14:15 IAC-18.E3.IP.10
TERRORISM AND SPACE SECURITY
Nikki Coleman, UNSW Australia, Australia

14:15-14:25 IAC-18.E3.IP.12
THE IGA AND THE INTERNATIONAL SPACE STATION: A MODEL OF COOPERATION FOR MARS ?
Alessio Rossi, Sapienza University of Rome, Italy

14:25-14:35 IAC-18.E3.IP.13
INTERNATIONAL COOPERATION AND GENERAL PUBLIC INVOLVEMENT FOR FUTURE LUNAR MISSIONS
Laura Miquel Parra, Politecnico di Torino, Spain

14:35-14:45 IAC-18.E3.IP.14
UNDERCUTTING INTERNATIONAL COOPERATION IN SPACE EXPLORATION THROUGH DOMESTIC LEGISLATION
Vinay Narayan, , India

SCREEN # 36

13:15-13:25 IAC-18.E5.IP.3
CONSTRUCTION OF A MARTIAN HABITAT USING IN-SITU MATERIALS FOR RADIATION SHIELDING
Nihat Mert Ogut, Technical University of Delft, The Netherlands

13:25-13:35 IAC-18.E5.IP.4
ANALOGUE HABITATION EXPERIMENT AND EUROMOONMARS2018 CAMPAIGN
Germaine van der Sanden, ESA - European Space Agency, The Netherlands

13:35-13:45 IAC-18.E5.IP.6
INTEGRATING THREE DISCIPLINARY PERSPECTIVES IN AN ITERATIVE DESIGN PROCESS FOR THE SURFACE HABITAT OF THE FIRST HUMAN MISSION TO MARS
Carlijn van der Werf, Delft University of Technology (TU Delft), The Netherlands, The Netherlands

13:45-13:55 IAC-18.E5.IP.14
PHOTOBIOREACTOR FAÇADE SYSTEM FOR SELF-SUSTAINABLE MOON SURFACE HABITAT
Kyunghwan KIM, , France

13:55-14:05 IAC-18.E1.IP.32
SPACE MEDICINE OPPORTUNITIES FOR UNDERGRADUATE MEDICAL EDUCATION IN CANADA: PAST, PRESENT, AND FUTURE
Adam Sirek, Western University, Canada

14:05-14:15 IAC-18.E1.IP.33
SAMI: HIGH RESOLUTION 3D VISUALISATION OF ESA EARTH OBSERVATION SATELLITE MISSIONS
Montserrat Pinol Sole, ESA - European Space Agency, The Netherlands

14:15-14:25 IAC-18.E1.IP.35
METHODOLOGY AND TOOLING OF THE PROCESS OF SOLVING INTERDISCIPLINARY PROBLEMS WITH AIM AT ENHANCING THE EFFICIENCY OF SKILLS IN MULTIPLE CRITERIA ANALYSIS FOR FUTURE ENGINEERS
Victor Leonov, Bauman Moscow State Technical University, Russian Federation

14:25-14:35 IAC-18.B2.IP.21
ASTROGYRO – IRU QUALIFICATION AND TEST RESULTS
Florian Schuh, Jena-Optronik GmbH, Germany

SCREEN # 37

13:15-13:25 IAC-18.E6.IP.4
THE ENTREPRENEURIAL VISION WITH A MASSIVE TRANSFORMATIVE PURPOSE: CREATING FULLY-IMMERSIVE EXPERIENTIAL SIMULATION-BASED EDUTAINMENT WITH "LETS GET S.T.E.A.M.E.D" WORKSHOPS AND SIMULATION EVAS USING EXPONENTIAL TECHNOLOGIES.
Susan Ip-Jewell, Mars Academy USA, United States

13:25-13:35 IAC-18.E6.IP.6
CUBEROVER: AN ENABLING TECHNOLOGY FOR PLANETARY EXPLORATION
Michael Provenzano, , United States

13:35-13:45 IAC-18.E7.IP.4
THE PROPOSED PUBLIC PROCUREMENT FOR PROJECTS TO ENHANCE INDUSTRIAL CAPABILITIES THROUGH JAPANESE LESSONS LEARNED
Mizuki Tani Hatakenaka, Leiden University, The Netherlands

13:45-13:55 IAC-18.E7.IP.5
WHICH FUTURE FOR THE "GLOBAL COMMONS"?
Kai-Uwe Schrogl, European Space Agency (ESA), France

13:55-14:05 IAC-18.E7.IP.7
PUBLIC INVESTMENT LAW – A TOOL TO SECURE NEWSPACE FINANCING?
Erik Pellander, BHO Legal , Germany

14:05-14:15 IAC-18.E7.IP.8
DEVELOPING AND ADAPTING SPACE LAW TO GOVERN LONG TERM AND PERMANENT HUMAN SETTLEMENT OF OUTER SPACE, THE MOON AND OTHER CELESTIAL BODES
Thomas Cheney, Northumbria University, United Kingdom

14:15-14:25 IAC-18.E7.IP.9
SPACE 4.0: CREATING INCENTIVES FOR STATES TO CLARIFY AND COORDINATE INTERPRETATIONS OF WHAT
activities constitutes responsibility and liability under international space law
Mari Amanda Eldholm, ECSL, Norway

14:25-14:35 IAC-18.E7.IP.10
'THE DANGER OF SPACE DEBRIS: LEGAL ISSUES AND SOLUTIONS ASSOCIATED WITH ACTIVE DEBRIS REMOVAL'
Joanna Langlade, International Institute of Air and Space Law, Leiden University, Belgium

14:35-14:45 IAC-18.E7.IP.11
LEGISLATING SPACE - INDIA'S 2021 SPACE ODYSSEY
Jai Sanyal, Other, India

SCREEN # 38

13:15-13:25 IAC-18.E7.IP.13
FLEDGLING POLISH SPACE INDUSTRY READY FOR LIFT -OFF
Katarzyna Malinowska, Kozminski University, Poland

13:25-13:35 IAC-18.E7.IP.14
GLOBAL SPACE GOVERNANCE: THE NEED TO ADOPT DE-INSTITUTIONALIZED COOPERATION MODELS
Jonathan Andrade, , Brazil

13:35-13:45 IAC-18.E7.IP.15
OWNING THE HOSTED PAYLOAD AND INTERNATIONAL SPACE LAW
Akiko Watanabe, , Japan

13:45-13:55 IAC-18.E7.IP.16
QUANTUM BITS OF LIGHT: THE FUTURE OF SATELLITE QUANTUM KEY DISTRIBUTION UNDER EXPORT ADMINISTRATION REGULATIONS AND THE FIRST AMENDMENT OF THE UNITED STATES CONSTITUTION
Marshall Mckellar, , United States

13:55-14:05 IAC-18.E7.IP.17
RATIFYING THE MOON AGREEMENT WITH A RESERVATION FOR (ARTICLE 11.1)
zeina ahmad, University of Leiden, Netherlands Antilles

14:05-14:15 IAC-18.E7.IP.18
REAL-TIME CHALLENGES FOR THE REGISTRATION REGIME: WHERE TO?
Georgia-Eleni Exarchou, National and Kapodistrian University Of Athens, Greece

14:15-14:25 IAC-18.E7.IP.19
THE APPLICATION OF THE PRINCIPLES OF COMMUNITY LAW AND PUBLIC INTERNATIONAL LAW IN THE PROPOSAL OF A CENTRAL AMERICAN SPACE POLICY: AD HOC THE CENTRAL AMERICAN COURT OF JUSTICE AND COCESNA.
Brenda Ulate Gamboa, University of Costa Rica, Costa Rica

14:25-14:35 IAC-18.E7.IP.20
ANALYSIS OF THE INTELLECTUAL PROPERTY PROTECTION INSTRUMENTS IN THE ITALIAN SPACE SECTOR
Michael Urso, Italian Space Agency (ASI), Italy

14:35-14:45 IAC-18.E7.IP.21
ESTABLISHING UNIVERSAL JURISDICTION ON SPACE DEBRIS
Qing Zhao, CHINA UNIVERSITY OF POLITICAL SCIENCE AND LAW, China

SCREENS # 39 & # 40 FOR LATE SUBMISSIONS – CHECK THE IAF APP FOR LATEST UPDATES

7 Technical Sessions by Symposium

Please check the IAF App to get the latest updates on the Technical Sessions

Nr.	Session name	Date	Time	Room
A1	**IAA/IAF SPACE LIFE SCIENCES SYMPOSIUM**			
A1.1	Behaviour, Performance and Psychosocial Issues in Space	Mon, 1 Oct	15:00	CCB Danzig
A1.2	Human Physiology in Space	Tue, 2 Oct	09:45	CCB Danzig
A1.3	Medical Care for Humans in Space	Tue, 2 Oct	14:45	CCB Danzig
A1.4	Medicine in Space and Extreme Environments	Wed, 3 Oct	09:45	CCB Danzig
A1.5	Radiation Fields, Effects and Risks in Human Space Missions	Wed, 3 Oct	14:45	CCB Danzig
A1.6	Astrobiology and Exploration	Thu, 4 Oct	09:45	CCB Danzig
A1.7	Life Support, habitats and EVA Systems	Fri, 5 Oct	09:45	CCB Danzig
A1.8	Biology in Space	Fri, 5 Oct	13:30	CCB Danzig
A2	**IAF MICROGRAVITY SCIENCES AND PROCESSES SYMPOSIUM**			
A2.1	Gravity and Fundamental Physics	Mon, 1 Oct	15:00	Bremen 2
A2.2	Fluid and Materials Sciences	Tue, 2 Oct	09:45	Bremen 2
A2.3	Microgravity Experiments from Sub-Orbital to Orbital Platforms	Wed, 3 Oct	14:45	Bremen 2
A2.4	Science Results from Ground Based Research	Thu, 4 Oct	09:45	Bremen 2
A2.5	Facilities and Operations of Microgravity Experiments	Thu, 4 Oct	14:45	Bremen 2
A2.6	Life and Microgravity Sciences on board ISS and beyond (Part I)	Fri, 5 Oct	09:45	Bremen 2
A2.7	Life and Microgravity Sciences on board ISS and beyond (Part II)	Fri, 5 Oct	13:30	Bremen 2
A3	**IAF SPACE EXPLORATION SYMPOSIUM**			
A3.1	Space Exploration Overview	Mon, 1 Oct	15:00	CCB Kaisen
A3.2A	Moon Exploration – Part 1	Tue, 2 Oct	09:45	CCB Kaisen
A3.2B	Moon Exploration – Part 2	Tue, 2 Oct	14:45	CCB Kaisen
A3.2C	Moon Exploration – Part 3	Fri, 5 Oct	09:45	CCB Kaisen
A3.3A	Mars Exploration – missions current and future	Wed, 3 Oct	09:45	CCB Kaisen
A3.3B	Mars Exploration – Science, Instruments and Technologies	Wed, 3 Oct	14:45	CCB Kaisen
A3.4A	Small Bodies Missions and Technologies (Part 1)	Thu, 4 Oct	09:45	CCB Kaisen
A3.4B	Small Bodies Missions and Technologies (Part 2)	Fri, 5 Oct	13:30	CCB Kaisen
A3.5	Solar System Exploration	Thu, 4 Oct	14:45	CCB Kaisen
A4	**47th IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The Next Steps**			
A4.1	SETI 1: SETI Science and Technology	Tue, 2 Oct	14:45	ÖVB 3
A4.2	SETI 2: SETI and Society	Fri, 5 Oct	13:30	ÖVB 3
A5	**21st IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM**			
A5.1	Human Exploration of the Moon and Cislunar Space	Wed, 3 Oct	14:45	ZARM 3
A5.2	Human Exploration of Mars	Wed, 3 Oct	09:45	ZARM 3
A5.3-B3.6	Human and Robotic Partnerships in Exploration - Joint session of the Human Spaceflight and Exploration Symposia	Thu, 4 Oct	14:45	ZARM 4
A5.4-D2.8	Space Transportation Solutions for Deep Space Missions	Fri, 5 Oct	09:45	CCB Lloydsaal
A5.IP	Interactive Presentations - 21st IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM	Thu, 4 Oct	13:15	IP Hall
A6	**16th IAA SYMPOSIUM ON SPACE DEBRIS**			
A6.1	Space Debris Detection, Tracking and Characterization	Mon, 1 Oct	15:00	ZARM 1
A6.10-C1.7	Orbital Safety and Optimal Operations in an Increasingly Congested Environment (Joint Astrodynamics/Space Debris Session)	Thu, 4 Oct	14:45	CCB Borgward
A6.2	Modelling and Risk Analysis	Tue, 2 Oct	09:45	ZARM 1
A6.3	Impact-Induced Mission Effects and Risk Assessments	Wed, 3 Oct	09:45	ZARM 1
A6.4	Mitigation and Standards : status, lessons learnt and future with smallsats and constellations	Tue, 2 Oct	14:45	ZARM 1
A6.5	Post Mission Disposal and Space Debris Removal (1)	Thu, 4 Oct	09:45	ZARM 1
A6.6	Post Mission Disposal and Space Debris Removal (2)	Thu, 4 Oct	14:45	ZARM 1
A6.7	Operations in Space Debris Environment, Situational Awareness	Fri, 5 Oct	09:45	ZARM 1
A6.8	Policy, Legal, Institutional and Economic Aspects of Space Debris Detection, Mitigation and Removal (Joint Session with IAF Space Security Committee)	Fri, 5 Oct	13:30	ZARM 1
A6.9	Orbit Determination and Propagation	Wed, 3 Oct	14:45	ZARM 1
A7	**IAF SYMPOSIUM ON FUTURE SPACE ASTRONOMY AND SOLAR-SYSTEM SCIENCE MISSIONS**			
A7.1	Space Agency Strategies and Plans	Mon, 1 Oct	15:00	CCB Roselius
A7.2	Science Goals and Drivers for Future Exoplanet, Space Astronomy, Physics, and Outer Solar System Science Missions	Wed, 3 Oct	09:45	CCB Roselius
A7.3	Technology Needs for Future Missions, Systems, and Instruments	Thu, 4 Oct	14:45	CCB Roselius
B1	**IAF EARTH OBSERVATION SYMPOSIUM**			
B1.1	International Cooperation in Earth Observation Missions	Mon, 1 Oct	15:00	ZARM 3
B1.2	Future Earth Observation Systems	Tue, 2 Oct	09:45	ZARM 3
B1.3	Earth Observation Sensors and Technology	Tue, 2 Oct	14:45	ZARM 3
B1.4	Earth Observation Data Management Systems	Fri, 5 Oct	09:45	ZARM 3
B1.5	Earth Observation Applications, Societal Challenges and Economic Benefits	Thu, 4 Oct	09:45	ZARM 3
B1.6-GTS.1	Citizen Science in Global Earth Observation Systems	Thu, 4 Oct	14:45	ÖVB 4
B2	**IAF SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM**			
B2.1	Advanced Space Communications and Navigation Systems	Mon, 1 Oct	15:00	ÖVB 3
B2.2	Fixed and Broadcast Communications	Tue, 2 Oct	09:45	ÖVB 3
B2.3	Mobile Satellite Communications and Navigation Technology	Wed, 3 Oct	09:45	ÖVB 3
B2.4	Advanced Satellite Services	Wed, 3 Oct	14:45	ÖVB 3
B2.5	Space-Based Navigation Systems and Services	Thu, 4 Oct	09:45	ÖVB 3
B2.6	Near-Earth and Interplanetary Communications	Thu, 4 Oct	14:45	ÖVB 3
B2.7	Advanced Technologies for Space Communications and Navigation	Fri, 5 Oct	09:45	ÖVB 3
B2.8-GTS.3	Space Communications and Navigation Global Technical Session	Tue, 2 Oct	14:45	ÖVB 4
B3	**IAF HUMAN SPACEFLIGHT SYMPOSIUM**			
B3.1	Governmental Human Spaceflight Programs (Overview)	Mon, 1 Oct	15:00	ZARM 4
B3.2	Commercial Human Spaceflight Programs	Tue, 2 Oct	09:45	ZARM 4
B3.3	Utilization & Exploitation of Human Spaceflight Systems	Tue, 2 Oct	14:45	ZARM 4
B3.4-B6.4	Flight & Ground Operations of HSF Systems (A Joint Session of the Human Spaceflight and Space Operations Symposia)	Wed, 3 Oct	09:45	ZARM 4
B3.5	Astronaut Training, Accommodation, and Operations in Space	Thu, 4 Oct	09:45	ZARM 4
B3.6-A5.3	Human and Robotic Partnerships in Exploration - Joint session of the Human Spaceflight and Exploration Symposia	Thu, 4 Oct	14:45	ZARM 4

Nr.	Session name	Date	Time	Room
B3.7	Advanced Systems, Technologies, and Innovations for Human Spaceflight	Fri, 5 Oct	09:45	ZARM 4
B3.8-E7.7	Legal framework for collaborative space activities - New ways of launching (micro-launching) and large constellation microsats (Joint IAF/IISL session)	Fri, 5 Oct	13:30	ZARM 4
B3.9-GTS.2	Human Spaceflight Global Technical Session	Wed, 3 Oct	14:45	ÖVB 4
B4	**25th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS**			
B4.1	19th Workshop on Small Satellite Programmes at the Service of Developing Countries	Tue, 2 Oct	09:45	ZARM 2
B4.2	Small Space Science Missions	Mon, 1 Oct	15:00	ZARM 2
B4.3	Small Satellite Operations	Tue, 2 Oct	14:45	ZARM 2
B4.4	Small Earth Observation Missions	Wed, 3 Oct	09:45	ZARM 2
B4.5	Access to Space for Small Satellite Missions	Wed, 3 Oct	14:45	ZARM 2
B4.5A-C4.8	Joint Session between IAA and IAF for Small Satellite Propulsion Systems	Fri, 5 Oct	13:30	ZARM 5
B4.6A	Generic Technologies for Small/Micro Platforms	Thu, 4 Oct	09:45	ZARM 2
B4.6B	Generic Technologies for Nano/Pico Platforms	Thu, 4 Oct	14:45	ZARM 2
B4.7	Highly Integrated Distributed Systems	Fri, 5 Oct	13:30	ZARM 2
B4.8	Small Spacecraft for Deep-Space Exploration	Fri, 5 Oct	09:45	ZARM 2
B4.9-GTS.5	Small Satellite Missions Global Technical Session	Fri, 5 Oct	13:30	ÖVB 4
B5	**IAF SYMPOSIUM ON INTEGRATED APPLICATIONS**			
B5.1	Tools and Technology in Support of Integrated Applications	Mon, 1 Oct	15:00	Bremen 3
B5.2	Integrated Applications End-to-End Solutions	Thu, 4 Oct	09:45	Bremen 3
B5.3	Satellite Commercial Applications	Thu, 4 Oct	14:45	Bremen 3
B6	**IAF SPACE OPERATIONS SYMPOSIUM**			
B6.1	Ground Operations - Systems and Solutions	Thu, 4 Oct	14:45	CCB Franzius
B6.2	New Space Operations Concepts and Advanced Systems	Fri, 5 Oct	09:45	CCB Bergen
B6.3	Mission Operations, Validation, Simulation and Training	Mon, 1 Oct	15:00	CCB Franzius
B6.4-B3.4	Flight & Ground Operations of HSF Systems (A Joint Session of the Human Spaceflight and Space Operations Symposia)	Wed, 3 Oct	09:45	ZARM 4
C1	**IAF ASTRODYNAMICS SYMPOSIUM**			
C1.1	Orbital Dynamics (1)	Mon, 1 Oct	15:00	CCB Borgward
C1.2	Orbital Dynamics (2)	Tue, 2 Oct	09:45	CCB Borgward
C1.3	Attitude Dynamics (1)	Tue, 2 Oct	14:45	CCB Borgward
C1.4	Attitude Dynamics (2)	Wed, 3 Oct	09:45	CCB Borgward
C1.5	Guidance, Navigation & Control (1)	Wed, 3 Oct	14:45	CCB Borgward
C1.6	Guidance, Navigation & Control (2)	Thu, 4 Oct	09:45	CCB Borgward
C1.7-A6.10	Orbital Safety and Optimal Operations in an Increasingly Congested Environment (Joint Astrodynamics/Space Debris Session)	Thu, 4 Oct	14:45	CCB Borgward
C1.8	Mission Design, Operations & Optimization (1)	Fri, 5 Oct	09:45	CCB Borgward
C1.9	Mission Design, Operations & Optimization (2)	Fri, 5 Oct	13:30	CCB Borgward
C2	**IAF MATERIALS AND STRUCTURES SYMPOSIUM**			
C2.1	Space Structures I - Development and Verification (Space Vehicles and Components)	Mon, 1 Oct	15:00	ÖVB 2
C2.2	Space Structures II - Development and Verification (Deployable and Dimensionally Stable Structures)	Tue, 2 Oct	09:45	ÖVB 2
C2.3	Space Structures - Dynamics and Microdynamics	Tue, 2 Oct	14:45	ÖVB 2
C2.4	Advanced Materials and Structures for High Temperature Applications	Wed, 3 Oct	09:45	ÖVB 2
C2.5	Smart Materials and Adaptive Structures	Wed, 3 Oct	14:45	ÖVB 2
C2.6	Space Environmental Effects and Spacecraft Protection	Thu, 4 Oct	09:45	ÖVB 2
C2.7	Space Vehicles – Mechanical/Thermal/Fluidic Systems	Thu, 4 Oct	14:45	ÖVB 2
C2.8	Specialised Technologies, Including Nanotechnology	Fri, 5 Oct	09:45	ÖVB 2
C2.9	Advancements in Materials Applications and Rapid Prototyping	Fri, 5 Oct	13:30	ÖVB 2
C2.IP	Interactive Presentations - IAF MATERIALS AND STRUCTURES SYMPOSIUM	Thu, 4 Oct	13:15	IP Hall
C3	**IAF SPACE POWER SYMPOSIUM**			
C3.1	Solar Power Satellite	Mon, 1 Oct	15:00	CCB Bergen
C3.2	Wireless Power Transmission Technologies and Application	Tue, 2 Oct	09:45	CCB Bergen
C3.3	Advanced Space Power Technologies	Wed, 3 Oct	14:45	ZARM 4
C3.4	Space Power System for Ambitious Missions	Thu, 4 Oct	14:45	CCB Danzig
C3.5-C4.7	Joint Session on Advanced and Nuclear Power and Propulsion Systems	Fri, 5 Oct	09:45	ZARM 5
C4	**IAF SPACE PROPULSION SYMPOSIUM**			
C4.1	Propulsion System (1)	Mon, 1 Oct	15:00	ZARM 5
C4.10	Propulsion Technology (3)	Fri, 5 Oct	13:30	Bremen 3
C4.2	Propulsion System (2)	Tue, 2 Oct	09:45	ZARM 5
C4.3	Propulsion Technology (1)	Wed, 3 Oct	09:45	ZARM 5
C4.4	Electric Propulsion	Wed, 3 Oct	14:45	ZARM 5
C4.5	Propulsion Technology (2)	Thu, 4 Oct	09:45	ZARM 5
C4.6	New Missions Enabled by New Propulsion Technology and Systems	Thu, 4 Oct	14:45	ZARM 5
C4.7-C3.5	Joint Session on Advanced and Nuclear Power and Propulsion Systems	Fri, 5 Oct	09:45	ZARM 5
C4.8-B4.5A	Joint Session between IAA and IAF for Small Satellite Propulsion Systems	Fri, 5 Oct	13:30	ZARM 5
C4.9	Hypersonic Air-breathing and Combined Cycle Propulsion	Tue, 2 Oct	14:45	ZARM 5
D1	**IAF SPACE SYSTEMS SYMPOSIUM**			
D1.1	Innovative and Visionary Space Systems	Mon, 1 Oct	15:00	CCB London
D1.2	Space Systems Architectures	Tue, 2 Oct	09:45	CCB London
D1.3	Technologies to Enable Space Systems	Tue, 2 Oct	14:45	CCB London
D1.4A	Space Systems Engineering - Methods, Processes and Tools (1)	Thu, 4 Oct	09:45	CCB London
D1.4B	Space Systems Engineering - Methods, Processes and Tools (2)	Thu, 4 Oct	14:45	CCB London
D1.5	Lessons Learned in Space Systems: Achievements, Challenges, Best Practices, Standards.	Fri, 5 Oct	09:45	CCB London
D1.6	Cooperative and Robotic Space Systems	Fri, 5 Oct	13:30	CCB London
D2	**IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM**			
D2.1	Launch Vehicles in Service or in Development	Mon, 1 Oct	15:00	CCB Lloydsaal
D2.2	Launch Services, Missions, Operations, and Facilities	Tue, 2 Oct	09:45	CCB Lloydsaal
D2.3	Upper Stages, Space Transfer, Entry and Landing Systems	Wed, 3 Oc	09:45	CCB Lloydsaal
D2.4	Future Space Transportation Systems	Wed, 3 Oct	14:45	CCB Lloydsaal
D2.5	Technologies for Future Space Transportation Systems	Thu, 4 Oct	09:45	CCB Lloydsaal
D2.6	Future Space Transportation Systems Verification and In-Flight Experimentation	Thu, 4 Oct	14:45	CCB Lloydsaal
D2.7	Small Launchers: Concepts and Operations (Part I)	Tue, 2 Oct	14:45	CCB Lloydsaal
D2.8-A5.4	Space Transportation Solutions for Deep Space Missions	Fri, 5 Oct	09:45	CCB Lloydsaal
D2.9-D6.2	Safe Transportation Systems for Sustainable Commercial Human Spaceflight / Small Launchers: Concepts and Operations (Part II)	Fri, 5 Oct	13:30	CCB Lloydsaal

Nr.	Session name	Date	Time	Room
D3	**16th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT**			
D3.1	Strategies & Architectures as the Framework for Future Building Blocks in Space Exploration and Development	Mon, 1 Oct	15:00	Bremen 1
D3.2	Systems and Infrastructures to Implement Future Building Blocks in Space Exploration and Development	Tue, 2 Oct	14:45	Bremen 1
D3.3	Novel Concepts and Technologies to Enable Future Building Blocks in Space Exploration and Development	Wed, 3 Oct	14:45	Bremen 1
D3.4	Space Technology and System Management Practices and Tools	Thu, 4 Oct	14:45	Bremen 1
D4	**16th IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE**			
D4.1	Innovative Concepts and Technologies	Tue, 2 Oct	09:45	Bremen 1
D4.2	Contribution of Space Activities to Solving Global Societal Issues	Wed, 3 Oct	09:45	Bremen 1
D4.3	Conceptualizing Space Elevators and Tethered Satellites	Thu, 4 Oct	09:45	Bremen 1
D4.4	Strategies for Rapid Implementation of Interstellar Missions: Precursors and Beyond	Fri, 5 Oct	09:45	Bremen 1
D4.5	Space Resources: Technologies, Systems, Missions and Policies	Fri, 5 Oct	13:30	Bremen 1
D5	**51st IAA SYMPOSIUM ON SAFETY, QUALITY AND KNOWLEDGE MANAGEMENT IN SPACE ACTIVITIES**			
D5.1	Quality and safety, a challenge for traditional and new space	Tue, 2 Oct	14:45	Bremen 2
D5.2	Knowledge management for space activities in the digital era	Wed, 3 Oct	09:45	Bremen 2
D5.3	Prediction, Testing, Measurement and Effects of space environment on space missions	Thu, 4 Oct	14:45	ZARM 3
D5.4	Cyber-security threats to space missions and countermeasures to address them	Fri, 5 Oct	13:30	ZARM 3
D6	**IAF SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES**			
D6.1	Commercial Spaceflight Safety and Emerging Issues	Wed, 3 Oct	09:45	ÖVB 4
D6.2-D2.9	Safe Transportation Systems for Sustainable Commercial Human Spaceflight / Small Launchers: Concepts and Operations (Part II)	Fri, 5 Oct	13:30	CCB Lloydsaal
D6.3	Enabling safe commercial spaceflight: vehicles and spaceports	Thu, 4 Oct	09:45	ÖVB 4
E1	**IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM**			
E1.1	Ignition - Primary Space Education	Fri, 5 Oct	09:45	CCB Scharoun
E1.2	Lift Off - Secondary Space Education	Fri, 5 Oct	13:30	CCB Scharoun
E1.3	On Track - Undergraduate Space Education	Tue, 2 Oct	09:45	CCB Scharoun
E1.4	In Orbit - Postgraduate Space Education	Tue, 2 Oct	14:45	CCB Scharoun
E1.5	Enabling the Future - Developing the Space Workforce	Wed, 3 Oct	14:45	CCB Scharoun
E1.6	Calling Planet Earth - Space Outreach to the General Public	Mon, 1 Oct	15:00	CCB Scharoun
E1.7	New Worlds - Non-Traditional Space Education and Outreach	Thu, 4 Oct	09:45	CCB Scharoun
E1.8	Hands-on Space Education and Outreach	Wed, 3 Oct	09:45	CCB Scharoun
E1.9	Space Culture – Public Engagement in Space through Culture	Thu, 4 Oct	14:45	CCB Scharoun
E2	**46th STUDENT CONFERENCE**			
E2.1	Student Conference - Part 1	Tue, 2 Oct	09:45	ÖVB 4
E2.2	Student Conference - Part 2	Wed, 3 Oct	09:45	CCB London
E2.3-GTS.4	Student Team Competition	Mon, 1 Oct	15:00	ÖVB 4
E2.4	Educational Pico and Nano Satellites	Wed, 3 Oct,	14:45	CCB London

Nr.	Session name	Date	Time	Room
E3	**31st IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS**			
E3.1	International Cooperation for the benefits of developing countries and emerging space nations	Tue, 2 Oct	09:45	CCB Franzius
E3.2	Ways ahead in Space Exploration	Tue, 2 Oct	14:45	CCB Franzius
E3.3	Space economy – Stimulating measureable economic activities through space policies and budgets	Wed, 3 Oct	09:45	CCB Franzius
E3.4	Assuring a Safe, Secure and Sustainable Environment for Space Activities	Wed, 3 Oct	14:45	CCB Franzius
E3.5-E7.6	33rd Joint IAA/IISL Round Table: Global Cooperation in Planetary Defence	Thu, 4 Oct	09:45	CCB Franzius
E3.6	Strategic Risk Management for successful space & defence programmes	Fri, 5 Oct	09:45	CCB Franzius
E4	**52nd IAA HISTORY OF ASTRONAUTICS SYMPOSIUM**			
E4.1	Memoirs & Organizational Histories	Tue, 2 Oct	14:45	CCB Roselius
E4.2	Scientific & Technical History	Thu, 4 Oct	09:45	CCB Roselius
E4.3A	Germany's Contribution to Astronautics Post WWII	Fri, 5 Oct	13:30	CCB Roselius
E4.3B	"Can you believe they put a man on the moon?"	Fri, 5 Oct	14:45	CCB Roselius
E5	**29th IAA SYMPOSIUM ON SPACE AND SOCIETY**			
E5.1	Space Architecture: Habitats, Habitability, and Bases	Tue, 2 Oct	14:45	CCB Bergen
E5.2	Is Space R&D Truly Fostering A Better World For Our Future?	Wed, 3 Oct	14:45	CCB Bergen
E5.3	Contemporary Arts Practice and Outer Space: A Multi-Disciplinary Approach	Wed, 3 Oct	09:45	CCB Bergen
E5.4	Space Assets and Disaster Management	Thu, 4 Oct	09:45	CCB Bergen
E5.5	Space Societies, Professional Associations and Museums	Thu, 4 Oct	14:45	CCB Bergen
E6	**IAF BUSINESS INNOVATION SYMPOSIUM**			
E6.1	Entrepreneurship and Innovation: The Practitioners' Perspectives	Tue, 2 Oct	09:45	CCB Roselius
E6.2	Finance and Investment: The Practitioners' Perspectives	Wed, 3 Oct	14:45	CCB Roselius
E6.3	Innovation: The Academics' Perspectives	Fri, 5 Oct	09:45	CCB Roselius
E7	**61st IISL COLLOQUIUM ON THE LAW OF OUTER SPACE**			
E7.1	10th Nandasiri Jasentuliyana Keynote Lecture on Space Law and Young Scholars Session	Tue, 2 Oct	09:45	Bremen 3
E7.2	Financing space: Procurement, competition and regulatory approach	Tue, 2 Oct	14:45	Bremen 3
E7.3	Integrated space applications, EO telecoms navigation	Wed, 3 Oct	09:45	Bremen 3
E7.4	Space law at Unispace +50: consequences and future perspectives	Wed, 3 Oct	14:45	Bremen 3
E7.5	The relationship between space law and cyberlaw, and other recent developments in space law	Fri, 5 Oct	09:45	Bremen 3
E7.6-E3.5	33rd Joint IAA/IISL Round Table: Global Cooperation in Planetary Defence	Thu, 4 Oct	09:45	CCB Franzius
E7.7-B3.8	Legal framework for collaborative space activities - New ways of launching (micro-launching) and large constellation microsats (Joint IAF/IISL session)	Fri, 5 Oct	13:30	ZARM 4
E8	**IAA MULTILINGUAL ASTRONAUTICAL TERMINOLOGY SYMPOSIUM**			
E8.1	Multilingual Astronautical Terminology	Fri, 5 Oct	09:45	CCB Herschel
GTS	**GLOBAL TECHNICAL SYMPOSIUM**			
GTS.1-B1.6	Citizen Science in Global Earth Observation Systems	Thu, 4 Oct	14:45	ÖVB 4
GTS.2-B3.9	Human Spaceflight Global Technical Session	Wed, 3 Oct	14:45	ÖVB 4
GTS.3-B2.8	Space Communications and Navigation Global Technical Session	Tue, 2 Oct	14:45	ÖVB 4
GTS.4-E2.3	Student Team Competition	Mon, 1 Oct	15:00	ÖVB 4
GTS.5-B4.9	Small Satellite Missions Global Technical Session	Fri, 5 Oct	13:30	ÖVB 4

8 Technical Papers by Symposium

Technical Papers as of September 2018.

Please check the IAF 2018 App to get the latest updates on the Technical Papers.

A1. IAA/IAF SPACE LIFE SCIENCES SYMPOSIUM

Coordinator(s): *Oleg Orlov , SSC RF-Institute of Biomedical Problems RAS, Russian Federation; Peter Graef , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*

A1.1. Behaviour, Performance and Psychosocial Issues in Space

October 1 2018, 15:00 — CCB Danzig

Co-Chair(s): *Nick Kanas , University of California, San Francisco (UCSF), United States; Peter Suedfeld , University of British Columbia, Canada;*
Rapporteur(s): *Gro M. Sandal , University of Bergen, Norway;*

IAC-18.A1.1.2
ONE FOR ALL AND ALL FOR ONE: CREW COPING ON THE INTERNATIONAL SPACE STATION
Jelena Brcic, University of British Columbia, Canada

IAC-18.A1.1.3
WHAT DO ASTRONAUTS TWEET ABOUT? A LINGUISTIC ANALYSIS.
Sara Ahmadian, University of British Columbia, Canada

IAC-18.A1.1.4
TEAM PERFORMANCE IN SPACE CREWS: HOUSTON, WE HAVE A TEAMWORK PROBLEM
Lindsay Larson, , United States

IAC-18.A1.1.5
MULTICULTURAL PERSPECTIVE OF NEGATIVE MOOD STATES IN LONG-TERM ISOLATION AND CONFINEMENT
Qianying Ma, Beihang University (BUAA), China

IAC-18.A1.1.6
EXERCISE CAN MAINTAIN BRAIN FUNCTION BY FNIRS USING VFT IN CONFINED ENVIRONMENT LIKE ISS IN JAPAN - SINGLE CASE EXPERIMENTAL ABA DESIGN -
Shin-ichiro SASAHARA, University of Tsukuba, Japan

IAC-18.A1.1.7
STRUCTURAL BRAIN PLASTICITY DURING ISOLATION AND CONFINEMENT - DOES GENDER PLAY A ROLE?
Alexander Christoph Stahn, University of Pennsylvania, Germany

IAC-18.A1.1.8
ELECTROCORTICAL EVIDENCE FOR IMPAIRED AFFECTIVE PICTURE PROCESSING AFTER LONG-TERM IMMOBILIZATION STRESS
Katharina Brauns, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.1.9
EVALUATION OF ANXIETY IN SITUATION OF SHORT-TERM MICROGRAVITY (EVA-0G): SENSITIVITY OF PSYCHOLOGICAL PARAMETERS
Cécile Guillot, Université de Lorraine, France

IAC-18.A1.1.10
NEW METHODOLOGICAL APPROACH TO THE ANALYSIS OF CREW-MCC COMMUNICATION
Vadim Gushin, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-18.A1.1.11
PRELIMINARY RESULTS OF CREW COMMUNICATION CONTENT ANALYSIS IN SIRIUS-17
Anna Yusupova, Institute for Biomedical Problems, Russian Federation

IAC-18.A1.1.12
RELATIONSHIP BETWEEN EMOTIONAL STABILITY, GROUP STATUS AND COHESION IN THE INTERNATIONAL CREW DURING SIMULATED MARS EXPLORATION MISSION
Polina Kuznetsova, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-18.A1.1.13
ADDRESSING DISABILITY IN SPACE: ICARES-1 MARS ANALOG MISSION
Aleksander Wasniowski, Poznan University of Medical Sciences, Poland

A1.2. Human Physiology in Space

October 2 2018, 09:45 — CCB Danzig

Co-Chair(s): *Inesa Kozlovskaya , State Scientific Center of the Russian Federation - Institute of Biomedical Problems of the Russian Academy of Sciences, Russian Federation; Jens Jordan , Institute of Aerospace Medicine (DLR), Germany;*
Rapporteur(s): *Elena Fomina , State Scientific Center of Russian Federation, Institute of Biomedical Problems, Russian Academy of Sciences, Russian Federation;*

IAC-18.A1.2.1
MAIN RESULTS OF SPACE EXPERIMENT “CARDIOVECTOR” AND ITS FURTHER DEVELOPMENT
Irina Funtova, Institute for Biomedical Problems, Russian Federation

IAC-18.A1.2.2
CENTRAL BLOOD PRESSURE AND PULSE WAVE VELOCITY BEFORE AND AFTER SIX MONTHS IN SPACE
Fabian Hoffmann, DLR (German Aerospace Center), Germany

IAC-18.A1.2.3
MIOCARDIUM BIOELECTRICAL CHARACTERISTICS, AUTONOMIC REGULATION AND CIRCADIAN RHYTHMS IN SPACE
Vasily Rusanov, Institute for Bio-Medical Problems of RAS, Russian Federation

IAC-18.A1.2.4
RESPIRATORY VARIATION OF THE BALLISTOCARDIOGRAM (BCG) IS REVERSED IN SPACE - RESULTS OF THE EXPERIMENT “CARDIOVECTOR”
Elena Luchitskaya, Institute for Biomedical Problems, Russian Federation

IAC-18.A1.2.5
DECREASED INOTROPIC STATE OF THE HEART AFTER ONE-MONTH EXPOSURE TO MICROGRAVITY ASSESSED BY CARDIOVECTOR-1
Jeremy Rabineau, Université Libre de Bruxelles, Belgium

IAC-18.A1.2.6
SUPPORT REACTION DISTRIBUTION IN THE COURSE OF TREADMILL WALKING IN SPACE
Elena Tomilovskaya, Institute for Biomedical Problems, Russian Federation

IAC-18.A1.2.7
CARDIOVASCULAR REGULATION IN RESPONSE TO EXERCISE – FIRST RESULTS FROM ISS COSMONAUTS
Uwe Hoffmann, German Sports University Cologne, Germany

IAC-18.A1.2.8
CARDIORESPIRATORY REGULATION IN RESPONSE TO EXERCISE – FIRST RESULTS FROM HERA C4
Jessica Koschate, German Sports University Cologne, Germany

IAC-18.A1.2.9
THE CHANGES OF AEROBIC CAPACITY IN COMPARISON WITH THE RESTRUCTURING OF THE LOCOMOTION STRATEGIES AFTER THE LONG-DURATION SPACE FLIGHT
Elena Fomina, FSC RF-IMBP, Russian Federation

IAC-18.A1.2.10
CORE BODY TEMPERATURE CHANGES UNDER DIFFERENT PHYSICAL AND ENVIRONMENTAL CONDITIONS ON EARTH AND IN SPACE
Hanns-Christian Gunga, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.2.11
CORTICAL SOURCES OF RESTING STATE EEG DURING BED REST
Katharina Brauns, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.2.12
PECULIARITIES OF PATHOLOGICAL PROCESSES UNDER SIMULATED MICROGRAVITY (SPACE PATHOPHYSIOLOGY)
Victor Baranov, Federal Scientific Clinical Centre of the Federal Biomedical Agency of Russia, Russian Federation

IAC-18.A1.2.13
ACUTE AND CHRONIC EFFECTS OF STRESS ON BDNF: COMPARISON OF BED REST VS. ISOLATION
Alexander Christoph Stahn, University of Pennsylvania, Germany

IAC-18.A1.2.14
ALTERED INTRINSIC FUNCTIONAL BRAIN CONNECTIVITY AFTER FIRST-TIME EXPOSURE TO SHORT-TERM GRAVITATIONAL ALTERATIONS INDUCED BY PARABOLIC FLIGHT.
Angelique Van Ombergen, University of Antwerp, Belgium

IAC-18.A1.2.15
STRUCTURAL AND FUNCTIONAL EFFECTS OF REACTIVE JUMPS ON SKELETAL MUSCLE IN LONG-TERM BED REST (RSL-STUDY, COLOGNE)
Dieter Blottner, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.2.16
BODY FLUID DISTRIBUTION DURING ARTIFICIAL GRAVITY AS A COUNTERMEASURE AGAINST SPACE FLIGHT DECONDITIONING USING A SEGMENTAL BIOELECTRICAL IMPEDANCE ANALYSIS
Satoshi Iwase, Aichi Medical University, Japan

IAC-18.A1.2.17
UTILIZING THREE-DIMENSIONAL MOTION ANALYSIS AND FOOT PRINT DATA TO INVESTIGATE WALKING MOTION OF RATS EXPOSED TO SIMULATED MICROGRAVITY
Junichi Tajino, Kyoto University, Japan

IAC-18.A1.2.19
WHEELCHAIR HEAD IMMOBILIZATION PARADIGM: A GROUND-BASED ANALOG FOR POST-SPACEFLIGHT ASTRONAUT SENSORIMOTOR IMPAIRMENT
Jordan Dixon, University of Colorado Boulder, United States

IAC-18.A1.2.21 (non-confirmed)
DIRECT NUMERICAL SIMULATION OF GASTRIC DIGESTION OF FOODS IN A STOMACH MODEL UNDER NORMAL AND REDUCED GRAVITY
Yan Jin, University of Bremen, Germany

IAC-18.A1.2.22
EFFECTIVENESS OF HIGH-INTENSITY JUMP TRAINING COUNTERMEASURE ON MITRAL AND AORTIC FLOW AFTER 58-DAYS HEAD-DOWN BED-REST ASSESSED BY PHASE-CONTRAST MRI
Enrico Gianluca Caiani, Politecnico di Milano, Italy

IAC-18.A1.2.23
EFFECTS OF 60-DAY HEAD-DOWN TILT BED REST ON SKELETAL MUSCLE-PUMP BAROREFLEX
Da Xu, Simon Fraser University, Canada

IAC-18.A1.2.24
HIGH-INTENSITY EXERCISE TO COUNTERACT CARDIOVASCULAR DECONDITIONING DURING SIMULATED WEIGHTLESSNESS
Martina Anna Maggioni, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.2.25
MRI INVESTIGATION ON THE EFFECTIVENESS OF HIGH-INTENSITY JUMP TRAINING IN PRESERVING LUMBAR PARASPINAL MUSCLE MASS DURING 60 DAYS OF BED REST: RESULTS FROM THE COLOGNE RSL STUDY
Fabio Pivetta, Charité - University Medicine Berlin, Germany

IAC-18.A1.2.28
PRE-FLIGHT BODY WEIGHT PREDICTS OCULAR CHANGES IN SPACE
Jay Buckey, Dartmouth Medical School , United States

IAC-18.A1.2.29
MRI STUDY OF STRUCTURAL AND FUNCTIONAL CHANGES OF BACK MUSCLES AND SPINE UNDER CONDITIONS OF DRY IMMERSION
Ilya Rukavishnikov, Institute of Biomedical Problems, Russian Academy of Sciences, Russian Federation

A1.3. Medical Care for Humans in Space

October 2 2018, 14:45 — CCB Danzig

Co-Chair(s): *Oleg Orlov , SSC RF-Institute of Biomedical Problems RAS, Russian Federation; Satoshi Iwase , Aichi Medical University, Japan;*
Rapporteur(s): *Katrin Stang , DLR (German Aerospace Center), Germany;*

IAC-18.A1.3.1 (non-confirmed)
EFFECT OF ARTIFICIAL GRAVITY WITH EXERCISE ON SPACEFLIGHT DECONDITIONING IN HUMANS, AND PROJECT FOR ASSESSMENT OF ARTIFICIAL GRAVITY IN H-II TRANSFER VEHICLE IN INTERNATIONAL SPACE STATION.
Satoshi Iwase, Aichi Medical University, Japan

IAC-18.A1.3.2
IMPACT OF SIMULATED MOON AND MARS GRAVITIES WITH HEAD-UP TILT ON CARDIAC FUNCTION
Kyohei Marume, Aichi Medical University, Japan

IAC-18.A1.3.3
END-TO-END REMOTE AND TELE-MEDICINE
Till Eisenberg, Airbus Defence and Space - Space Systems, Germany

IAC-18.A1.3.4 (non-confirmed)
PROSPECTS OF HYPOMETABOLIC RESEARCH FOR LONG-TERM INTERSTELLAR FLIGHT
Yinghui Li, China Astronaut Research and Training Center , China

IAC-18.A1.3.5
DEVELOPMENT OF ASTRONAUTS’ NON-TECHNICAL SKILLS TAXONOMY FOR MEDICAL EVENT MANAGEMENT ON FUTURE LONG DURATION EXPLORATION MISSIONS
Steven Yule, Harvard Medical School, United States

IAC-18.A1.3.6
STUDY OF PERIODONTAL TISSUES IN 5-DAY DRY IMMERSION
V.K.ILYIN, M.A.SKEDINA, Z.O.SOLOVIOVA, A.A.KOVALEVA
INSTITUTE OF BIOMEDICAL PROBLEMS OF THE RUSSIAN ACADEMY OF SCIENCES, MOSCOW, RUSSIAN FEDERATION
Viacheslav Ilyin, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-18.A1.3.7
CONCEPTUALISING THE DESIGN OF CLINICAL TRIALS AND ITS ASSOCIATED SUPPORT SYSTEMS IN INTERPLANETARY MISSIONS
Mona Nasser, Plymouth University, United Kingdom

IAC-18.A1.3.8
MEASUREMENT OF EXERCISE GROUND REACTION FORCES UNDER APPROPRIATE CONDITIONS FOR THE DESIGN OF VIBRATION ISOLATION SYSTEMS
Kaitlin Lostroscio, University of South Florida, United States

IAC-18.A1.3.9
IMMUNOLAB: A NEW TOOL FOR THE LIFE SCIENCE EXPERIMENTS AND MEDICAL CONTROL IN MANNED SPACE MISSIONS.
Sergey Ponomarev, IBMP, Russian Federation

IAC-18.A1.3.10 (non-confirmed)
MICROGRAVITY-INDUCED OSTEOPOROSIS: A CHALLENGE FOR THE FUTURE OF SPACE PROGRAMS
Prisco Piscitelli, Euro Mediterranean Scientific Biomedical Institute, Italy

IAC-18.A1.3.11
The effect of microgravity and high intensity jumps countermeasure on default mode network activity during sleep
Christina Plomariti, Aristotle University of Thessaloniki, Greece

IAC-18.A1.3.12
A BRAIN NETWORK FRAMEWORK FOR INVESTIGATING MICROGRAVITY EFFECT AND EVALUATING THE EFFICACY OF COUNTERMEASURES ON SLEEP QUALITY
Polyxeni Gkivogkli, Aristotle University of Thessaloniki, Greece

IAC-18.A1.3.13
NEUROENGINEERING AND FUNCTIONAL NEUROIMAGING ADVANCES FOR ASSESSING SLEEP QUALITY ON REMOTE ENVIRONMENTS
Christos Frantzidi, Aristotle Uiniversity of Thessaloniki, Greece

IAC-18.A1.3.14
APPLYING DEEP LEARNING ALGORITHMS ON SLEEP DATA
Panteleimon Chriskos, Aristotle University of Thessaloniki, Greece

IAC-18.A1.3.16
ASTRONAUTICAL HYGIENE: A COMMUNAL DISCIPLINE TO SPACE MEDICINE AND A PREVENTIVE MEASURE TO SPACE DISEASES
Funmilola Adebisi Oluwafemi, National Space Research and Development Agency (NASRDA), Abuja, Nigeria

IAC-18.A1.3.17
TREATMENT OF STROKE IN DEEP SPACE MISSIONS BY THE USE OF A NEUROPROTECTANT AUTO-INJECTOR.
Diana Mayor, University of Toronto, Canada

IAC-18.A1.3.18
INTRODUCING THE ESA SPACEFLIGHT EXPERIMENT BIOFILMS – ADDRESSING THE NEEDS AND POTENTIAL OF NOVEL INNOVATIVE ANTIMICROBIAL MATERIALS FOR HUMAN AND ROBOTIC SPACEFLIGHT
Ralf Moeller, German Aerospace Center (DLR), Germany

IAC-18.A1.3.19
CHALLENGES AND FUTURE DIRECTIONS OF EVIDENCE BASED AEROSPACE HEALTH CARE THROUGH SCIENCE
Natasha Goumeniouk, Canadian Space Agency, Canada

IAC-18.A1.3.20
EXPERIMENTAL VALIDATION FOR DEVELOPMENT OF MEDICAL TECHNOLOGY OF OXIDATIVE STRESS (LIPID PEROXIDATION) NON-INVASIVE DIAGNOSIS DURING SPACE FLIGHT
Dmitry Tsarkov, SSC RF-Institute of Biomedical Problems RAS, Russian Federation

A1.4. Medicine in Space and Extreme Environments

October 3 2018, 09:45 — CCB Danzig

Co-Chair(s): *Hanns-Christian Gunga , Charité Universitätsmedizin Berlin, Germany; Oleg Orlov , SSC RF-Institute of Biomedical Problems RAS, Russian Federation;*
Rapporteur(s): *Christian Rogon , DLR (German Aerospace Center), Germany;*

IAC-18.A1.4.1
INTERNATIONAL COOPERATION IN SOLVING THE MEDICAL AND BIOLOGICAL ISSUES OF SPACE EXPLORATIONS MISSIONS
Oleg Orlov, SSC RF-Institute of Biomedical Problems RAS, Russian Federation

IAC-18.A1.4.2
DYNAMIC LOADING, VERTEBRAL BODY FLUID AND ENDPLATE DEFORMATION
Daniel Belavy, , Australia

IAC-18.A1.4.3
DEVELOPING TELESURGERY-TELEANESTHESIA PROTOCOLS WITH SIMULATION-BASED TELEMENTORING IN REMOTE AND EXTREME ENVIRONMENTS AND FEASIBILITY IN INTEGRATING 3D PRINTED SURGICAL TOOLS, VRAR IMMERSION TO TRAIN NON-MEDICAL ANALOG ASTRONAUTS
Jeremy Saget, Mars Academy USA, France

IAC-18.A1.4.4
REDUCED PARASYMPATHETIC OUTFLOW DURING OVERWINTERING IN ANTARCTICA
Martina Anna Maggioni, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.4.5
A MARS ANALOG MISSION; A MEDICAL PERSPECTIVE
Bonnie Posselt, , United Kingdom

IAC-18.A1.4.6
CHANGES IN FUNCTIONAL BRAIN ACTIVATION AFTER 30 DAYS OF ISOLATION AND CONFINEMENT
Anika Werner, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.4.7
EFFECTS OF 30 DAYS CONFINEMENT ON HEART RATE VARIABILITY IN THE HUMAN EXPLORATION RESEARCH ANALOG (HERA)
Alain Riveros, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.4.8
CHANGES IN LUMBAR VERTEBRAL BODY BONE TEXTURE AS AN INDEX OF BONE MICROARCHITECTURE IN BED REST STUDIES USING TRABECULAR BONE SCORE (TBS)
Gabriele Armbrecht, Charité - University Medicine Berlin, Germany

IAC-18.A1.4.9
IMPACT OF SLEEP RESTRICTION AND FRAGMENTATION ON OBJECTIVE AND SUBJECTIVE SLEEP QUALITY – AN INTERVENTION STUDY
Naima Laharnar, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.4.10
IMPACT OF AN EXTENDED STAY IN ANTARCTICA ON MUSCLE AND BONE HEALTH – FIRST RESULTS FROM THE CONCORDIA RESEARCH STATION
Roswitha Dietzel, Charité - University Medicine Berlin, Germany

IAC-18.A1.4.12
CARDIAC AUTONOMIC MODULATION AS A TOOL TO PREDICT PERFORMANCE IN A 100 KM ULTRAMARATHON
Lea Rundfeldt, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.4.13
SPATIO-TEMPORAL VISUALIZATION OF BIG DATA ANALYTICS DURING SPACEFLIGHT
Anastasiia Prysyazhnyuk, University of Ontario Institute of Technology (UOIT), Canada

IAC-18.A1.4.14
PERIPHERAL BLOOD DENDRITIC CELLS IN CREW MEMBERS OF THE "SIRIUS-17"
Sergey Ponomarev, IBMP, Russian Federation

IAC-18.A1.4.14
INFLUENCE OF SHORT-TERM ISOLATION IN A HERMETICALLY CLOSED FACILITY ON THE DYNAMICS OF METABOLIC REGULATION MARKERS AND PARAMETERS CHARACTERIZING THE STATE OF BONE TISSUE AND BODY COMPOSITION OF VOLUNTEERS («LUNA-2015» AND «SIRIUS-17»)
Galina Vassilieva, IBMP, Russian Federation

IAC-18.A1.4.15
3D REGIONAL DIFFERENTIATED BONE REMODELING MONITORING AT THE PROXIMAL FEMUR BEFORE, DURING 60 DAYS BED REST AND ONE YEAR FOLLOW-UP AFTER USING REACTIVE JUMP EXERCISES AS COUNTERMEASURE FOR AVOIDING LOSS OF BONE MASS
Zully Ritter, Charité - University Medicine Berlin, Germany

IAC-18.A1.4.16
DYSREGULATION OF THE CIRCADIAN CLOCK BY EXTERNAL FACTORS DISRUPTS CELLULAR PROCESSES AND IMPACTS IN PHYSIOLOGY AND HUMAN HEALTH
Angela Relógio, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.4.18
DENTAL HEALTH FOR LONG-TERM HUMAN SPACE MISSIONS WITH REMOTE SUPPORT AND ADVANCED TECHNOLOGY
Sandra Haeuplik-Meusburger, Vienna University of Technology, Austria

IAC-18.A1.4.19
HYPOCAMPUS - HIPPOCAMPAL PLASTICITY AND SPATIAL NAVIGATION ON THE ISS
Alexander Christoph Stahn, University of Pennsylvania, Germany

IAC-18.A1.4.20
ACUTE EFFECTS OF PHYSICAL EXERCISE ON COGNITIVE PERFORMANCE IN SIMULATED WEIGHTLESSNESS BY FULL WATER IMMERSION
Fabian Steinberg, Johannes Gutenberg University of Mainz, Germany

IAC-18.A1.4.21
CARDIAC AND PSYCHOLOGICAL MEASUREMENTS DURING AN ULTRAMARATHON IN COLD CLIMATE
Lea Rundfeldt, Charité Universitätsmedizin Berlin, Germany

A1.5. Radiation Fields, Effects and Risks in Human Space Missions

October 3 2018, 14:45 — CCB Danzig

Co-Chair(s): *Guenther Reitz , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Lawrence Pinsky , University of Houston, United States;*
Rapporteur(s): *Premkumar Saganti , Prairie View A&M University, United States;*

IAC-18.A1.5.1
A TLD-MICRODOSIMETER (LIBE-14) FOR AEROSPACE USAGE: RESULTS OF DOSIMETRY AND RADIATION RISK ASSESSMENT OF AIRLINE PILOTS UNDERTOOK LONG-HAUL INTERCONTINENTAL FLIGHTS DURING MARCH-MAY 2017
Bhaskar Mukherjee, The University of Sydney, Australia

IAC-18.A1.5.2
SPACE RADIATION AND MAGNETIC FIELD ENVIRONMENT SPECIFICATION FOR THE RADCUBE SPACE WEATHER RELATED CUBESAT MISSION
Balazs Zabori, MTA Centre for Energy Research, Hungary

IAC-18.A1.5.3
CURRENT STATUS OF TIMEPIX-BASED RADIATION MONITORING DEVICES IN SPACE AND A FIRST REPORT ON THE NEW TIMEPIX2 CHIP.
Lawrence Pinsky, University of Houston, United States

IAC-18.A1.5.4
OPTIMIZATION OF PASSIVE RADIATION SHIELDING FOR MANNED EXPLORATION BEYOND CISLUNAR SPACE USING HIGH-PERFORMANCE COMPUTING SERA ENVIRONMENT
Matthew Lund, University of Utah, United States

IAC-18.A1.5.6
PROTON AND FE ION-INDUCED EARLY AND LATE CHROMOSOME ABERRATIONS IN HUMAN EPITHELIAL AND FIBROBLAST CELLS
Rosalin Goss, National Aeronautics and Space Administration (NASA), Johnson Space Center, United States

IAC-18.A1.5.7
Radiation response of porcine lens epithelial cells and eye lenses in organ-culture
Christa Baumstark-Khan, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.A1.5.8 (non-confirmed)
THE FACILITY FOR SPACE RADIATION BIOLOGY EXPERIMENT ON THE CHINESE SPACE STATION
Yeqing Sun, Dalian Maritime University, China

IAC-18.A1.5.9 (non-confirmed)
A NEW RADIATION PAYLOAD FOR A POLAR ORBIT: TEN-KOH SPACECRAFT
Premkumar Saganti, Prairie View A&M University, United States

IAC-18.A1.5.10
INTERNATIONAL SCIENCE PAYLOAD ABOARD ORION EM-1: THE MATROSHKA ASTRORAD RADIATION EXPERIMENT (MARE)
Razvan Gaza, Lockheed Martin Corporation, United States

IAC-18.A1.5.11
TRITEL-B: CONCEPT FOR MEASURING DEPTH-DOSE AND DEPTH-LET ON THE RETURNABLE BIOLOGICAL SATELLITE BION-M2
Attila Hirn, MTA Centre for Energy Research, Hungary

IAC-18.A1.5.12
STUDY THE SPACE RADIATION EXPOSURE FOR RADIOGENIC LEUKEMIA IN AN INTERPLANETARY MISSION
THANGAVEL SANJEEVIRAJA, Hindustan University, India

A1.6. Astrobiology and Exploration

October 4 2018, 09:45 — CCB Danzig

Co-Chair(s): *Nicolas Walter , European Science Foundation, France; Petra Rettberg , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Brent Sherwood , Caltech/JPL, United States; Susann Groß , DLR (German Aerospace Center), Germany;*

IAC-18.A1.6.1
MASE AND MEXEM – FROM TERRESTRIAL MARS ANALOGUES SITES TO SPACE
Petra Rettberg, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.A1.6.2
SPECTROMODULE: A MODULAR IN-SITU SPECTROSCOPY PLATFORM FOR EXOBIOLOGY AND SPACE SCIENCES
Antonella Sgambati, OHB System AG-Bremen, Germany

IAC-18.A1.6.3
EXOCUBE: A MINIATURISED IN-SITU SPACE LABORATORY FOR ASTROBIOLOGICAL EXPOSURE EXPERIMENTS ON THE INTERNATIONAL SPACE STATION.
Andreas Elsaesser, Free University of Berlin, Germany

IAC-18.A1.6.4
BIOSAT - A COMMERCIAL ORBITAL LIFE SCIENCE EXPERIMENT PLATFORM
Klaus Slenzka, OHB System AG-Bremen, Germany

IAC-18.A1.6.5
NEXT GENERATION OF LIFE SCIENCE HARDWARE FOR SPACE RESEARCH
Gianluca Neri, Kayser Italia Srl, Italy

IAC-18.A1.6.6
EFFECTS OF LOW-EARTH ORBIT ON GROWTH OF A PHOTOSYNTHETIC MICROORGANISM
Morgan Taverner, University of Manitoba, Canada

IAC-18.A1.6.7
CUBEHAB - A MINIATURE LUNAR ECOSYSTEM
Klaus Slenzka, OHB System AG-Bremen, Germany

IAC-18.A1.6.8
OREOCUBE (ORGANICS EXPOSURE IN ORBIT): IN-SITU UV-VIS SPECTROSCOPY OF ORGANIC COMPOUNDS ON THE INTERNATIONAL SPACE STATION
Sebastian Wolf, Free University of Berlin, Germany

IAC-18.A1.6.9
A LOW EARTH ORBIT CUBESAT FOR TOMATO IDEOTYPE CULTIVATION
Paolo Marzioli, Sapienza University of Rome, Italy

IAC-18.A1.6.10
AN INTELLIGENT CELL SENSOR SYSTEM IN SPACE
Weiqiang Xia, Beijing Institute of Aerospace Systems Engineering, China

IAC-18.A1.6.11
VALIDATION OF ANALYTICAL INSTRUMENTATION FOR CONTINUOUS ONLINE MONITORING OF LARGE SPECTRA OF VOCS IN CLOSED HABITAT DURING SIMULATION OF SPACE FLIGHT
Viktor Fetter, Airbus DS, Germany

IAC-18.A1.6.12
THE SEARCH FOR LIFE ON MARS AND IN THE SOLAR SYSTEM – STRATEGIES, LOGISTICS AND INFRASTRUCTURES
Jean-Pierre Paul de Vera, German Aerospace Center (DLR), Berlin, Germany

A1.7. Life Support, habitats and EVA Systems

October 5 2018, 09:45 — CCB Danzig

Co-Chair(s): *Klaus Slenzka , OHB System AG-Bremen, Germany; Liu Hong , Xi'an Aerospace Propulsion Institute, China;*
Rapporteur(s): *Chiaki Mukai , Japan Aerospace Exploration Agency (JAXA), Japan; Michael Becker , DLR (German Aerospace Center), Germany;*

IAC-18.A1.7.1
A PROPOSED LIFE SUPPORT SYSTEM FOR SPACE TRAVEL
Oliver Opatz, Center for Space Medicine Berlin (ZWMB), Germany

IAC-18.A1.7.2
AN ALGAE MEMBRANE PHOTOBIOREACTOR FOR RESILIENT WATER MANAGEMENT
Melanie Pickett, University of South Florida, United States

IAC-18.A1.7.3
CHLAMYDOMONAS-COMMUNITY BIOREACTOR
Klaus Slenzka, OHB System AG-Bremen, Germany

IAC-18.A1.7.4
MICROALGAE CULTIVATION IN SPACE FOR FUTURE EXPLORATION MISSIONS: A SUMMARY OF THE DEVELOPMENT PROGRESS OF THE SPACEFLIGHT EXPERIMENT PBR@LSR ON THE INTERNATIONAL SPACE STATION ISS
Jochen Keppler, Institute of Space Systems, Universität Stuttgart, Germany

IAC-18.A1.7.6
PBR@LSR EXPERIMENT – READY TO FLY
Gisela Detrell, Institute of Space Systems, University of Stuttgart, Germany

IAC-18.A1.7.7
BACTERIAL MODIFICATION OF LUNAR AND MARTIAN REGOLITH FOR PLANT GROWTH IN LIFE SUPPORT SYSTEMS
Benjamin Lehner, TU Delft, The Netherlands

IAC-18.A1.7.8
E-NOSE: MEASURING SURFACE MICROBIAL CONTAMINATION AND OXIDATIVE STRESS OF COSMONAUTS – RESULTS AND FUTURE APPLICATIONS
Jan Grosser, German Aerospace Center (DLR), Germany

IAC-18.A1.7.9
IMPACTS OF THE EXPLORATION ATMOSPHERE ON THE IMPLEMENTATION OF AN ALGAL-BASED LIFE SUPPORT SYSTEM
Tobias Niederwieser, University of Colorado Boulder, United States

IAC-18.A1.7.10
STUDY OF MICROBIAL DECOMPOSITION OF DISPOSED PERSONAL HYGIENIC MEANS AND PLANT WASTES IN THE INTERESTS OF LIFE SUPPORT OF LUNAR BASES AND INTERPLANETARY MISSIONS KORSHUNOV D.V., ILYIN V.K. INSTITUTE FOR BIOMEDICAL PROBLEMS, MOSCOW, RUSSIA
Viacheslav Ilyin, Institute of Biomedical Problems (IBMP), Russian Academy of Sciences (RAS), Russian Federation

IAC-18.A1.7.11
EXTENDING THE UTILIZATION OF DUST PROTECTION SYSTEMS USING CARBON NANOTUBE EMBEDDED MATERIALS FOR LUNAR HABITATS FOR EXPLORATION MISSIONS
Kavya K. Manyapu, The Boeing Company, United States

IAC-18.A1.7.12
SURVIVAL RATE OF THE EARTHWORMS IN THE METEORITE BASIS- ISRU EXPERIMENTS DURING ICARES-1 ANALOG MISSION.
Aleksander Wasniowski, Poznan University of Medical Sciences, Poland

IAC-18.A1.7.13
THE ELEMENTS BALANCE IN THE SYSTEM COMBINING NITRIFICATION AND AEROPONIC CULTIVATION
Anna Jurga, Wroclaw University of Science and Technology, Poland

IAC-18.A1.7.14
MAKING SCIENCE FICTION A REALITY: ADVANCED CONCEPTS FOR HUMAN SPACE EXPLORATION
Nathan Boll, National Academies of Sciences, Engineering, and Medicine, United States

IAC-18.A1.7.15
BACTERIAL CELLULOSE FOR CLOTHES PRODUCTION IN SPACE USING KOMBUCHA MICROBIAL CONSORTIUM.
Agata Kolodziejczyk, Astronomia Nova Society, for Science Foundation, Poland

IAC-18.A1.7.16
GAS EXCHANGE AND LEAF ANATOMY OF LETTUCE IN RESPONSE TO BLUE AND RED LEDS AS A SOLE-SOURCE LIGHTING
Luigi Gennaro Izzo, University of Naples, Italy

IAC-18.A1.7.17
THE INFLUENCE OF OPERATING MODES ON TRICKLING FILTER PERFORMANCE
Gerhild Bornemann, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Institute of Aerospace Medicine, Germany

IAC-18.A1.7.18
INSECT PROTEIN AS A VIABLE, SUSTAINABLE RESOURCE FOR ASTRONAUT NUTRITION
Elise Harrington, University of Western Ontario (UWO), Canada

A1.8. Biology in Space

October 5 2018, 13:30 — CCB Danzig

Co-Chair(s): *Fengyuan Zhuang , Beihang University, China; Markus Braun , DLR, German Aerospace Center, Germany;*
Rapporteur(s): *Cora S. Thiel , Otto von Guericke University of Magdeburg, Germany; Nicole Buckley , Canadian Space Agency, Canada;*

IAC-18.A1.8.1
ZOOPLANKTON FOR THE PRODUCTION OF BIOMASS IN BIOREGENERATIVE LIFE SUPPORT SYSTEMS IN SPACE
Miriam Knie, University of Bayreuth, Germany

IAC-18.A1.8.2
OPTIMAL CLINOROTATION SETTINGS FOR MICROGRAVITY SIMULATION IN A. THALIANA SEEDLINGS
Alicia Villacampa, Centro de Investigaciones Biológicas (CSIC), Spain

IAC-18.A1.8.3
ALTERED HOMER CELL SIGNAL IN SKELETAL MUSCLE SOLEUS (SOL) OF HEAD TILT (HET-/-) MICE WITH A VESTIBULAR DISORDER
Gabor Trautmann, Charité Universitätsmedizin Berlin, Germany

IAC-18.A1.8.4
PERCEPTION OF UPRIGHT: INFLUENCE OF GENDER, VISION, GRAVITY AND PROPRIOCEPTIVE CUES
Rainer Herpers, Bonn-Rhein-Sieg University of Applied Sciences (BRSU), Germany

IAC-18.A1.8.5
ANALYSIS OF PURE MICROGRAVITY AND LOW EARTH ORBIT ENVIRONMENT EFFECTS ON MICROBES RESIDING IN THE HUMAN GUT
Shreya Choudhary, R.V.College of Engineering, India

IAC-18.A1.8.6
RAPID ADAPTATION TO MICROGRAVITY IN CELLS OF THE IMMUNE SYSTEM
Cora S. Thiel, Otto von Guericke University of Magdeburg, Germany

IAC-18.A1.8.7
TISSUE ENGINEERING AND MICROGRAVITY
Daniela Grimm, , Denmark

IAC-18.A1.8.8
GROWING BLOOD VESSELS IN SPACE: THE SPHEROIDS PROJECT
Marcus Krüger, Otto von Guericke University of Magdeburg, Germany

IAC-18.A1.8.9
THYROID CANCER CELLS IN MICROGRAVITY: RESULTS OF THE TEXUS 53 MISSION
Sascha Kopp, University Clinic of Magdeburg, Germany

IAC-18.A1.8.10 (non-confirmed)
MIRNA SEQUENCING AND BIOINFORMATICS ANALYSIS OF VASCULAR ENDOTHELIAL CELLS TREATED BY OXIDATIVE STRESS UNDER SIMULATED MICROGRAVITY
Jia Liu, China Astronaut Research and Training Center , China

IAC-18.A1.8.11
SIMULATED MICROGRAVITY ENHANCES ANGIOGENIC ACTIVITY OF MESENCHYMAL STROMAL CELLS
Andrey Ratushnyy, IBMP, Russian Federation

IAC-18.A1.8.12 (non-confirmed)
EFFECT OF MICROGRAVITY ON THE NUCLEUS
Howard Levine, National Aeronautics and Space Administration (NASA), Kennedy Space Center, United States

IAC-18.A1.8.13
TRANSCRIPTOMIC CHANGES IN ENDOTHELIAL AND MESENCHYMAL STROMAL CELLS UNDER SIMULATED MICROGRAVITY
Ludmila Buravkova, State Scientific Center of Russian Federation, Institute of Biomedical Problems, Russian Academy of Sciences, Russian Federation

IAC-18.A1.8.14
FLUMIAS DEMONSTRATOR: A MINIATURE, FAST-TRACK APPROACH TO LIVE CELL IMAGING MICROSCOPY ON THE ISS
Anna Catharina Carstens, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.A1.8.15
THE LIVE MICROGRAPH TECHNIQUE AND ITS RECENT APPLICATION TO THE SPACE EXPERIMENT OF STEM CELL'S PROLIFERATION AND DIFFERENTIATION IN CHINESE SPACECRAFT
WEIBO ZHENG, Shanghai Institute of Technical Physics, Chinese Academy of Sciences (CAS), China

IAC-18.A1.8.17 (non-confirmed)
ALTERED GRAVITY SIMULATION AND RADIATION TO COMPARE PLANT MODEL AND CROP SPECIES ADAPTATION TO SPACEFLIGHT AND MARS-LIKE ENVIRONMENTS
Raul Herranz, Centro de Investigaciones Biológicas (CSIC), Spain

IAC-18.A1.8.18
THE SIMULATED MICROGRAVITY CHANGES SURFACE MARKER EXPRESSION AND INHIBITS CELL CYCLE PROGRESSION OF MEGAKARYOBLASTIC CELL LINE MEG-01
Alisa Sokolovskaya, Research Institute of General Pathology and Pathophysiology / Russian Academy of Medical Sciences, Russian Federation

A2. IAF MICROGRAVITY SCIENCES AND PROCESSES SYMPOSIUM

Coordinator(s): *Nickolay N. Smirnov , Moscow Lomonosov State University, Russian Federation;*

Secretary(s): *Anastassiia Nikonova , Russian Academy of Sciences, Russian Federation;*

Vice-Coordinator(s): *Gabriel Pont , Centre National d'Etudes Spatiales (CNES), France;*

A2.1. Gravity and Fundamental Physics

October 1 2018, 15:00 — Bremen 2

Co-Chair(s): *Antonio Viviani , Università degli Studi della Campania "Luigi Vanvitelli", Italy; Hanns Selig , GERADTS GMBH, Germany;*
Rapporteur(s): *Qi Kang , National Microgravity Laboratory, Institute of Mechanics, Chinese Academy of Sciences., China;*

IAC-18.A2.1.1
CURRENT RESULTS OF THE MICROSCOPE SPACE MISSION: A TEST OF EQUIVALENCE PRINCIPLE.
Manuel Rodrigues, Office National d'Etudes et de Recherches Aérospatiales (ONERA), France

IAC-18.A2.1.2
ENHANCED ESTIMATION OF NEUTRAL THERMOSPHERIC DENSITIES WITH MICROSCOPE
Meike List, ZARM, University of Bremen, Germany

IAC-18.A2.1.3
TEST OF GENERAL RELATIVITY WITH GALILEO SATELLITES 5 AND 6
Felix Finke, ZARM, University of Bremen, Germany

IAC-18.A2.1.4
ACES - GETTING READY!
Marc Peter Hess, Airbus Defence and Space, Germany

IAC-18.A2.1.5 (non-confirmed)
WHAT IS SPECIAL ABOUT QUANTUM TECHNOLOGY?
Claus Lämmerzahl, ZARM Fab GmbH, Germany

IAC-18.A2.1.6
DESIGNING OPTICS FOR QUANTUM MATTER-WAVES
Reinhold Walser, TU Darmstadt, Germany

IAC-18.A2.1.7
OPTICAL FREQUENCY REFERENCES FOR SPACE APPLICATIONS
Thilo Schuldt, German Aerospace Center (DLR), Bremen, Germany, Germany

IAC-18.A2.1.8
ZERODUR BASED OPTICAL SYSTEMS FOR QUANTUM GAS EXPERIMENTS IN SPACE
Moritz Mihm, Johannes Gutenberg University of Mainz, Germany

IAC-18.A2.1.9
JOKARUS - AN OPTICAL ABSOLUTE FREQUENCY REFERENCE ON A SOUNDING ROCKET BASED ON MOLECULAR IODINE
Klaus Döringshoff, Humboldt University of Berlin, Germany

IAC-18.A2.1.10
WIGNER REPRESENTATION OF INTERACTING BECS IN THE THOMAS-FERMI LIMIT
Jan Teske, TU Darmstadt, Germany

IAC-18.A2.1.11
ULTRACOLD ATOMS FOR MATTER-WAVE INTERFEROMETRY IN MICROGRAVITY
Tammo Sternke, University of Bremen - ZARM, Germany

IAC-18.A2.1.12
ATOM INTERFEROMETRY FROM EARTH TO SPACE\\ THE QUANTUS, MAIUS, AND BECCAL CONSORTIA
Waldemar Herr, Leibniz Universiät Hannover, Germany

IAC-18.A2.1.13
QUANTUM GASES ABOARD THE ISS - CAPABILITIES OF THE BECCAL PROJECT
Lisa Wörner, University of Bremen; BECCAL collaboration, Germany

IAC-18.A2.1.14
MAIUS-1 - CREATING THE FIRST BOSE-EINSTEIN CONDENSATE IN SPACE
Hauke Müntinga, ZARM University of Bremen, Germany

IAC-18.A2.1.15
EXPANDING THE POSSIBILITIES OF SPACE BORNE QUANTUM BASED EXPERIMENTS
Christian Vogt, ZARM, University of Bremen, Germany

A2.2. Fluid and Materials Sciences

October 2 2018, 09:45 — Bremen 2

Co-Chair(s): *Nickolay N. Smirnov , Moscow Lomonosov State University, Russian Federation; Satoshi Matsumoto , Japan Aerospace Exploration Agency (JAXA), Japan;*
Rapporteur(s): *Thomas Driebe, DLR (German Aerospace Center), Germany;*

IAC-18.A2.2.1
KEYNOTE: FLUID SCIENCE EXPERIMENTS CONDUCTED ON THE ISS.
Valentina Shevtsova, Université Libre de Bruxelles, Belgium

IAC-18.A2.2.2
BOILING TWO-PHASE FLOW EXPERIMENT IN MICROGRAVITY ONBOARD INTERNATIONAL SPACE STATION
Satoshi Matsumoto, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.A2.2.3
OBSERVATION OF INTERFACIAL PHENOMENA BETWEEN IRON MELT AND MOLTEN OXIDES UNDER MICROGRAVITY
Masahito Watanabe, Gakushuin University, Japan

IAC-18.A2.2.4
MICROGRAVITY INVESTIGATION OF CAPILLARY FORCES IN IMBIBITION OF FLUID INTO POROUS MEDIA
Evgeniya Skryleva, Moscow Lomonosov State University, Russian Federation

IAC-18.A2.2.5
EXPERIMENTAL STUDY ON THERMOCAPILLARY-BUOYANCY MIGRATION INTERACTION OF AXISYMMETRIC TWO DROPS
Li DUAN, National Microgravity Laboratory, Institute of Mechanics, Chinese Academy of Sciences., China

IAC-18.A2.2.6
RESULTS OF THE MICROGRAVITY ZERO-BOIL-OFF TANK(ZBOT) EXPERIMENT
Mohammad Kassemi, NASA Glenn Research Center, United States

IAC-18.A2.2.7
MICROGRAVITY EXPERIMENTS AND NUMERICAL SIMULATIONS ON THE COMBUSTION OF SINGLE OXYGEN DROPLETS IN HYDROGEN
Florian Meyer, University of Bremen - ZARM, Germany

IAC-18.A2.2.8
INFLUENCE OF THERMOGRAVITATONAL COLUMN GEOMETRY ON STABILITY OF SEPARATION
Berin Šeta, Universitat Rovira i Virgili (URV), Spain

IAC-18.A2.2.9
ADVANCEMENTS IN THE QUANTIFICATION OF THE CRYSTAL STRUCTURE OF ZNS MATERIALS PRODUCED IN VARIABLE GRAVITY
Martin Castillo, ZARM, University of Bremen, Germany

IAC-18.A2.2.10
TRANSIENT NUMERICAL SIMULATION ON THE PERFORMANCE OF A NEON-CHARGED CRYOGENIC LOOP HEAT PIPE FOR SPACE APPLICATION
Falong He, National Microgravity Laboratory, Institute of Mechanics, Chinese Academy of Sciences., China

IAC-18.A2.2.11
IN-SITU OBSERVATION OF FOREIGN PHASE PARTICLES IN FLUIDS AND THEIR INTERACTION WITH A SOLIDIFICATION FRONT
Tina Sorgenfrei, University of Freiburg, Germany

IAC-18.A2.2.12
MARANGONI FLOWIN A FREE-STANDING THIN FLUID FILM
Torsten Trittel, Otto von Guericke University of Magdeburg, Germany

IAC-18.A2.2.13
IDEAL STATES OF GRANULAR MATTER IN MICROGRAVITY
Matthias Sperl, DLR (German Aerospace Center), Germany

IAC-18.A2.2.14
REVIEW AND DEVELOPMENT PLANNING OF MICROGRAVITY FLUID PHYSICS IN CHINA
Jin Zhaojun, Chinese Academy of Sciences, China

IAC-18.A2.2.15
DYNAMICS OF ENRICHED PARAMAGNETIC REE SALT SOLUTION CLUSTERS UNDER THE INFLUENCE OF THE COUPLED GRAVITY AND MAGNETIC FIELD
Kerstin Eckert, Dresden University of Technology (DUT) / Technische Universität Dresden, Germany

IAC-18.A2.2.17
Impact of solutocapillary convection in germanium-silicon growth with free liquid surfaces
Tina Sorgenfrei, University of Freiburg, Germany

A2.3. Microgravity Experiments from Sub-Orbital to Orbital Platforms

October 3 2018, 14:45 — Bremen 2
Co-Chair(s): Raffaele Savino , University of Naples "Federico II", Italy; Rainer Willnecker , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;
Rapporteur(s): Peter Hofmann , OHB System AG - Munich, Germany;

IAC-18.A2.3.1
AXIAL LOW BOND NUMBER SLOSHING OF LIQUID HYDROGEN
Michael Dreyer, University of Bremen, Germany

IAC-18.A2.3.2
PHASE SEPARATION OF HYDROGEN
André Pingel, University of Bremen - ZARM, Germany

IAC-18.A2.3.3
SOLIDIFICATION RESEARCH ON DIFFERENT MICROGRAVITY PLATFORMS
Laszlo Sturz, Access e.V., Germany

IAC-18.A2.3.4
SECAMP - STUDENT EXPERIMENTS WITH COLD ATOMS ON MICRO- AND HYPERGRAVITY PLATFORMS
Jens Grosse, University of Bremen - ZARM, Germany

IAC-18.A2.3.5
FINAL DESIGN OF THE MAIUS-2/3 PAYLOAD – AN ATOM INTERFEROMETER ON A SOUNDING ROCKET
Michael Elsen, ZARM, University of Bremen, Germany

IAC-18.A2.3.6
FLUMIAS AND PERWAVES: TWO "WORLD FIRST" EXPERIMENTS IN SPACE
Hergen Oltmann, Airbus Defence and Space, Germany

IAC-18.A2.3.7
IMPROVED PRESSURE-VOLUME-TEMPERATURE GAUGING METHOD FOR ELECTRIC PROPULSION SYSTEMS (PVT-GAMERS): FLIGHT-MODEL EXPERIMENT FOR ZERO-G VALIDATION.
Álvaro Tomás Soria Salinas, Luleå University of Technology, Sweden

IAC-18.A2.3.8
DUSTY PLASMAS ON PARABOLIC FLIGHTS AND DROP TOWER
Andre Melzer, University of Greifswald, Germany

IAC-18.A2.3.9
SELF-REWETTING CAPILLARY FLOW UNDER EVAPORATION AND CONDENSATION PROCESSES IN PARABOLIC FLIGHT CONDITIONS
Anselmo Cecere, Università degli Studi di Napoli "Federico II", Italy

IAC-18.A2.3.10
GROUND MEASUREMENTS OF MOLECULAR DIFFUSION IN MULTICOMPONENT LIQUID SYSTEMS CONTAINING NANOPARTICLES AS A PREPARATION OF THE DCMIX4 MICROGRAVITY EXPERIMENT.
Quentin Galand, Université Libre de Bruxelles, Belgium

IAC-18.A2.3.11
STUDY ON MARANGONI CONVECTION IN A LARGE SCALE LIQUID BRIDGE ON TG-2 SPACE LAB
Qi Kang, National Microgravity Laboratory, Institute of Mechanics, Chinese Academy of Sciences., China

IAC-18.A2.3.13
COLLISIONS OF CHARGED GRAINS IN MICROGRAVITY
Felix Jungmann, University Duisburg-Essen, Germany

A2.4. Science Results from Ground Based Research

October 4 2018, 09:45 — Bremen 2

Co-Chair(s): *Antonio Viviani , Università degli Studi della Campania "Luigi Vanvitelli", Italy; Valentina Shevtsova , Université Libre de Bruxelles, Belgium;*
Rapporteur(s): *Nickolay N. Smirnov , Moscow Lomonosov State University, Russian Federation;*

IAC-18.A2.4.1
FIRE BEHAVIOUR OF POLYDIMETHYLSILOXANE MATERIALS FOR SPACECRAFT APPLICATIONS
Ulises Rojas Alva, The University of Edinburgh, United Kingdom

IAC-18.A2.4.2
FLAME PROPAGATION IN WEIGHTLESSNESS ABOVE THE BURNING SURFACE OF MATERIAL
Veronika Tyurenkova, Scientific Research Institute for System Analysis, Russian Academy of Sciences (RAS), Russian Federation

IAC-18.A2.4.3
EXTERNAL HEAT SOURCE PHENOMENON AND FIRES
Vinayak Malhotra, SRM University Chennai, India

IAC-18.A2.4.4
THE DCMIX PROJECT: MEASUREMENT OF THERMODIFFUSION PROCESSES IN TERNARY MIXTURES ON GROUND AND IN SPACE
Marcel Schraml, University of Bayreuth, Germany

IAC-18.A2.4.5
GRAVITATIONAL STABILITY ANALYSIS ON DOUBLE DIFFUSION CONVECTION IN TERNARY MIXTURES
Berin Šeta, Universitat Rovira i Virgili (URV), Spain

IAC-18.A2.4.6
CRITERIA FOR DOMINATED FORCE REGIME MAP IN MULTIPHASE THERMAL FLUID SYSTEM
Wang-Fang Du, Institute of Mechanics, Chinese Academy of Sciences, China

IAC-18.A2.4.7
NONLINEAR OSCILLATORY FLOWS IN A TWO-LAYER SYSTEM WITH A TEMPERATURE - DEPENDENT HEAT RELEASE
Ilya Simanovskii, TECHNION - Israel Institute of Technology, Israel

IAC-18.A2.4.8
ENHANCED HEAT TRANSFER IN A CYLINDRICAL ANNULUS UNDER 1G AND LOW-G CONDITIONS
Martin Meier, BTU Cottbus, Germany

IAC-18.A2.4.9
EFFECT OF EVAPORATION ON FLOW STRUCTURE OF ACOUSTICALLY LEVITATED DROPLET
Kenji Kobayashi, University of Tsukuba, Japan

IAC-18.A2.4.10
EXPERIMENTAL INVESTIGATION OF EVAPORATION OF MULTICOMPONENT DROPLET BY ACOUSTIC LEVITATION
Yuki Niimura, Kogakuin University, Japan

IAC-18.A2.4.11
THERMOPHYSICAL PROPERTY MEASUREMENT USING LEVITATION TECHNIQUE UNDER MICROGRAVITY AND ON GROUND
Masahito Watanabe, Gakushuin University, Japan

IAC-18.A2.4.12
Surface instability of paramagnetic liquid in non-uniform magnetic field
Barbara Fritzsche, TU Dresden, Germany

IAC-18.A2.4.13
THE DEVELOPMENT STATUS AND TREND ANALYSIS OF SPACE MATERIAL SCIENCE RESEARCH IN CHINA
YAN LIU, Technology and Engineering Center for Space Utilization, China

A2.5. Facilities and Operations of Microgravity Experiments

October 4 2018, 14:45 — Bremen 2

Co-Chair(s): *Gabriel Pont , Centre National d'Etudes Spatiales (CNES), France; Rainer Willnecker , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Satoshi Matsumoto , Japan Aerospace Exploration Agency (JAXA), Japan;*

IAC-18.A2.5.1
REPORT ON PROGRESS OF THE GRAVITOWER BREMEN - PROTOTYPE
Andreas Gierse, ZARM University of Bremen, Germany

IAC-18.A2.5.2
CONTROL, SENSOR AND DIAGNOSTICS SYSTEMS DESIGN FOR A 1.5 SECONDS HIGH QUALITY MICRO GRAVITY DROP TOWER FACILITY
Jonas Büttner, IRS, University of Stuttgart, Germany

IAC-18.A2.5.3
MIGROP - PARABOLIC FLIGHT WITH LIGHT AIRCRAFT - A NEW PLATFORM FOR ZERO-G, PARTIAL-G AND HYPER-G EXPERIMENTS
Hanns Selig, GERADTS GMBH, Germany

IAC-18.A2.5.4
USING ONBOARD DATA FUSION OF IMU AND GNSS FOR IMPROVEMENT OF SCIENTIFIC ROCKET FLIGHTS
Alexander Schmidt, German Aerospace Center (DLR), Germany

IAC-18.A2.5.5
THE TEXUS/MAXUS TRANSFORMATION - HOW TO KEEP SOUNDING ROCKETS VERSATILE AND COST EFFECTIVE
Andreas Schuette, Airbus DS GmbH, Germany

IAC-18.A2.5.6
A MODEL-DRIVEN SOFTWARE ARCHITECTURE FOR ULTRA-COLD GAS EXPERIMENTS IN SPACE
Benjamin Weps, DLR (German Aerospace Center), Germany

IAC-18.A2.5.7
FUTURE CAPABILITIES OF THE ELECTROMAGNETIC LEVITATOR (EML) ON-BOARD THE ISS: OXYGEN SENSING AND CONTROL SYSTEM (OCS)
Winfried Aicher, Airbus DS GmbH, Germany

IAC-18.A2.5.8 (non-confirmed)
GENERATION OF ARTIFICIAL GRAVITY BY ULTRASOUNDS TO OVERCOME MICROGRAVITY ENVIRONMENTS
Iciar Gonzalez, Consejo Superior de Investigaciones Científicas (CSIC), Spain

IAC-18.A2.5.9
X-RAY A TOOL FOR MICROGRAVITY EXPERIMENTS
Christian Lockowandt, SSC, Sweden

IAC-18.A2.5.10
MULTISENSORY REAL-TIME SPACE TELEROBOTICS
Marta Ferraz, ESA - European Space Agency, Netherlands Antilles

IAC-18.A2.5.11
OPERATION OF THE MICROGRAVITY VIBRATION ISOLATION SYSTEM (MVIS) FACILITY ON THE INTERNATIONAL SPACE STATION
Jennifer Michels, , Canada

IAC-18.A2.5.12
SPATIAL EXPERIMENT TECHNOLOGIES SUITABLE FOR UNRETURNABLE BIOREACTOR
Zhang Tao, Shanghai Institute of Technical Physics, Chinese Academy of Sciences (CAS), China

A2.6. Life and Microgravity Sciences on board ISS and beyond (Part I)

October 5 2018, 09:45 — Bremen 2

Co-Chair(s): *Bernard Zappoli , Centre National d'Etudes Spatiales (CNES), France; Peter Hofmann , OHB System AG - Munich, Germany;*
Rapporteur(s): *Angelika Diefenbach , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*

IAC-18.A2.6.1
10 YEARS UTILIZATION OF THE EPM FACILITY IN COLUMBUS – FROM HUMAN PHYSIOLOGY TO COMMERCIAL EXPERIMENTS
Marco Berg, OHB System, Germany

IAC-18.A2.6.2
COMPLEX PLASMA EXPERIMENTS IN PK-4 FACILITY ON BOARD THE INTERNATIONAL SPACE STATION
Mikhail Pustylnik, DLR (German Aerospace Center), Germany

IAC-18.A2.6.3
EKOPLASMA - THE FUTURE OF COMPLEX PLASMA RESEARCH ABOARD THE INTERNATIONAL SPACE STATION
Christina A. Knapek, Deutsches Zentrum fuer Luft- und Raumfahrt (DLR), Germany

IAC-18.A2.6.4
FLUID SCIENCE MISSIONS ONBOARD COLUMBUS
Stefan Petschelt, Airbus DS GmbH, Germany

IAC-18.A2.6.5
HYDRODYNAMICS OF DROPLET LATTICES IN QUASI 2D FREE-STANDING LIQUID CRYSTAL FILMS
Christoph Klopp, Otto von Guericke University of Magdeburg, Germany

IAC-18.A2.6.6
COARSENING OF AQUEOUS FOAMS. MICROGRAVITY EXPERIMENTS
Dominique Langevin, CNRS - UPS, France

IAC-18.A2.6.7
THE SOFT MATTER DYNAMICS EXPERIMENT FOR THE ISS
Robert Sütterlin, Airbus DS GmbH, Germany

IAC-18.A2.6.8
MATERIAL SCIENCE LAB OPERATIONS ONBOARD THE INTERNATIONAL SPACE STATION
Jan Gegner, German Aerospace Center (DLR), Germany

IAC-18.A2.6.9
DECLIC: ON ITS WAY TO DECLIC-EVO
Remi Canton, Centre National d'Etudes Spatiales (CNES), France

IAC-18.A2.6.10
THE ELECTROMAGNETIC LEVITATOR (EML) ON-BOARD THE ISS: CAPABILITIES, ON-ORBIT PERFORMANCE AND RECENT ENHANCEMENTS.
Wolfgang Soellner, Airbus DS GmbH, Germany

IAC-18.A2.6.11
CONTAINERLESS PROCESSING ON ISS: EXPERIMENT OPERATIONS IN ESA'S EML, THE ELECTROMAGNETIC LEVITATOR
Sandra Schumann, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.A2.6.12
THERMOPHYSICAL PROPERTIES OF METALLIC ALLOYS IN THE LIQUID PHASE: RECENT RESULTS OF CONTAINERLESS ELECTROMAGNETIC PROCESSING ON THE INTERNATIONAL SPACE STATION ISS
Hans Fecht, Ulm University, Germany

IAC-18.A2.6.13
THE MATERIALS SCIENCE LABORATORY - ELECTROMAGNETIC LEVITATOR (EML) ON THE INTERNATIONAL SPACE STATION: THERMOPHYSICAL PROPERTIES OF A TIAL ALLOY (GE 48-2-2) IN THE LIQUID PHASE
Rainer Wunderlich, Ulm University, Germany

IAC-18.A2.6.14
BAKE IN SPACE: TECHNOLOGY DEMONSTRATION
Sebastian Marcu, Bake in Space, Germany

IAC-18.A2.6.15
ATMOFLOW – SIMULATING ATMOSPHERIC FLOWS ON THE INTERNATIONAL SPACE STATION. PART I: EXPERIMENT AND ISS-IMPLEMENTATION CONCEPT
Peter Canfield, Airbus Defence and Space, Germany

A2.7. Life and Microgravity Sciences on board ISS and beyond (Part II)

October 5 2018, 13:30 — Bremen 2

Co-Chair(s): *Angelika Diefenbach , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Cora S. Thiel , Otto von Guericke University of Magdeburg, Germany; Peter Graef , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Satoshi Matsumoto , Japan Aerospace Exploration Agency (JAXA), Japan;*

IAC-18.A2.7.1
LIFE SCIENCE RESEARCH IN SPACE, WHERE WE ARE AND WHERE WE WANT TO GO
Astrid Adrian, , Germany

IAC-18.A2.7.2
ADVANCES OF SPACE LIFE SCIENCE PROJECTS ON CHINESE TIANZHOU-1
PEI HAN, Technology and Engineering Center for Space Utilization, Chinese Academy of Sciences, China

IAC-18.A2.7.3
DESIGN AND DEVELOPMENT OF A CUBESAT PLATFORM FOR SUPPORTING HUMAN PHYSIOLOGICAL IN-VITRO STUDIES IN SPACE
Carolina Moreno Aguirre, Skolkovo Institute of Science and Technology, Russian Federation

IAC-18.A2.7.4
REMOTE CONTROLLED MINIATURIZED LAB PLATFORM FOR SPACE RESEARCH
Guy Samburski, Space Pharma SA, Israel

IAC-18.A2.7.5
SPACE FLOW - A CONCEPT FOR ADVANCED FLOW CYTOMETRY
Sandra Podhajsky, OHB System AG-Bremen, Germany

IAC-18.A2.7.7
THE STATUS OF PREPARATION FOR THE ATOMIZATION EXPERIMENT IN MICROGRAVITY ON KIBO
Tomokazu Dohkojima, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.A2.7.8
ARISE: BUILDING PLANETARY SEEDLINGS ON THE ISS
Grzegorz Musiolik, University of Duisburg-Essen, Germany

IAC-18.A2.7.9
ASI-BIOMISSION VITA INC. 51/52 NANOROS EXPERIMENT: SKELETAL MUSCLE CELL PROTECTION AGAINST OXIDATIVE STRESS WITH CERIUM OXIDE NANOPARTICLES IN SPACE
Giada Graziana Genchi, Istituto Italiano di Tecnologia, Italy

IAC-18.A2.7.10
THE EFFECT OF MICROGRAVITY AND COSMIC RAYS ON IMMORTALISED HUMAN CELL LINES IN A SUSPENSION CULTURE CONDITION ON A NANOSATELLITE PLATFORM.
Hannah Nazri, University of Oxford, United Kingdom

IAC-18.A2.7.11
THE EFFECTS OF LONG-TERM VIBRATION ON HUMAN CHONDROCYTES.
Markus Wehland, University Clinic of Magdeburg, Germany

IAC-18.A2.7.12
The power of life - how biology can help address the long term energy demands of space colonization
Trevor Kalkus, University of Fribourg, Switzerland, United States

IAC-18.A2.7.13
EVALUATING THE MICROBIAL ENVIRONMENT ABOARD ISS TO ENABLE AN OPTIMIZED MICROBIOME FOR DEEP SPACE HUMAN EXPLORATION
Karen Dannemiller, The Ohio State University College of Engineering, United States

IAC-18.A2.7.14
DEFINING A SPACEFLIGHT BIOFILM EXPERIMENT THROUGH COMPREHENSIVE ASSESSMENTS OF MATERIAL, MEDIA, AND HARDWARE BIOCOMPATIBILITY
Zeena Nisar, University of Colorado Boulder, United States

IAC-18.A2.7.15
CONTROLLING SPACEFLIGHT FUNGAL BIOFILMS: THE SEARCH FOR ANTIMICROBIAL SURFACES
Marta Cortesao, German Aerospace Center (DLR), Germany

IAC-18.A2.7.16
TRANSLATIONAL OMICS RESEARCH ON THE INTERNATIONAL SPACE STATION
John Love, NASA, United States

IAC-18.A2.7.17 (non-confirmed)
EFFECTS OF SPACE ENVIRONMENT ON PLANT CELL GROWTH AND PROLIFERATION. ROLE OF RED LIGHT IN COUNTERACTING GRAVITATIONAL STRESS AND PROMOTING ADAPTATION.
F. Javier Medina, Centro de Investigaciones Biológicas (CSIC), Spain

IAC-18.A2.7.18
ATMOFLOW - SIMULATING ATMOSPHERIC FLOWS ON THE INTERNATIONAL SPACE STATION. PART II: EXPERIMENTS AND NUMERICAL SIMULATIONS
Florian Zaussinger, BTU Cottbus, Germany

A3. SPACE EXPLORATION SYMPOSIUM

Coordinator(s)*: Bernard Foing , ESA/ESTEC, ILEWG & VU Amsterdam, The Netherlands; Christian Sallaberger , Canadensys Aerospace Corporation, Canada;*

A3.1. Space Exploration Overview

October 1 2018, 15:00 — CCB Kaisen

Co-Chair(s): *Christian Sallaberger , Canadensys Aerospace Corporation, Canada; Kathy Laurini , National Aeronautics and Space Administration (NASA), United States;*
Rapporteur(s): *Keyur Patel , National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States; Norbert Frischauf , , Austria;*

IAC-18.A3.1.1
THE THIRD EDITION OF THE GLOBAL EXPLORATION ROADMAP
Kathy Laurini, National Aeronautics and Space Administration (NASA), United States

IAC-18.A3.1.2
DEVELOPMENT OF SPACE EXPLORATION SCENARIOS - CHALLENGES AND SOLUTIONS FOR EMERGING SPACE COUNTRIES
Khaled Al Hashmi, UAE Space Agency, United Arab Emirates

IAC-18.A3.1.3
THE MOON AS A STEPPING STONE TO HUMAN MARS MISSIONS
John Connolly, National Aeronautics and Space Administration (NASA), Johnson Space Center, United States

IAC-18.A3.1.5
THE MOON VILLAGE CONCEPT: CAPTURING NEW GLOBAL CONTEXTS AND SHAPING INTERNATIONAL ENGAGEMENT
Piero Messina, European Space Agency (ESA), France

IAC-18.A3.1.6
PRINCIPLES FOR A PRACTICAL MOON BASE
Brent Sherwood, Caltech/JPL, United States

IAC-18.A3.1.7
POSSIBLE MOON RESEARCH AND EXPLORATION SCENARIOS BASED ON RUSSIA'S PARTICIPATION IN INTERNATIONAL CIS-LUNAR STATION DEEP SPACE GATEWAY
Mariya Danilova, Central Research Institute of Machine Building (TSNIIMASH), Russian Federation

IAC-18.A3.1.8
EXPLORATION STRATEGIES ENABLED BY COMMERCIAL SPACE ARCHITECTURES
Alain Berinstain, Moon Express Inc., United States

IAC-18.A3.1.10
PREPARING POTENTIAL EUROPEAN ROLES IN THE INTERNATIONAL EXPLORATION OF THE MOON WITHIN THE EUROPEAN EXPLORATION ENVELOPE PROGRAMME
Markus Landgraf, European Space Agency (ESA), The Netherlands

IAC-18.A3.1.11
Future funding schemes for space exploration
Stephanie Willekens, Euroconsult, France

IAC-18.A3.1.12
Planmap: Geological mapping supporting the exploration of the Moon, Mars and Mercury
Angelo Pio Rossi, Jacobs University Bremen, Germany

A3.2A. Moon Exploration – Part 1

October 2 2018, 09:45 — CCB Kaisen

Co-Chair(s): *Bernard Foing , ESA/ESTEC, ILEWG & VU Amsterdam, The Netherlands; David Korsmeyer , National Aeronautics and Space Administration (NASA), United States;*
Rapporteur(s): *Nadeem Ghafoor , Canadensys Aerospace Corporation, Canada; Sylvie Espinasse , European Space Agency (ESA), The Netherlands;*

IAC-18.A3.2A.2
A LUNAR REFORMATION: CURRENT STATUS AND POTENTIAL FUTURE OF A NEW APPROACH TO LUNAR RETURN
Alexander MacDonald, NASA HQ, United States

IAC-18.A3.2A.3
VALIDATION OF THE PILOT HAZARD DETECTION AND AVOIDANCE FUNCTION FOR MOON EXPLORATION
Jean-Francois Hamel, NGC Aerospace Ltd., Canada

IAC-18.A3.2A.4
RUSSIAN LUNAR EXPLORATION PROGRAM IMPLEMENTATION STATUS
Sergei Antonovich Lemeshevsky, Lavochkin Association, Russian Federation

IAC-18.A3.2A.5
LANDING ON THE MOON AND A HOP - THE CHALLENGES OF DESIGNING, BUILDING AND INTEGRATING THE SPACEIL LUNAR LANDER PROPULSION SYSTEM
Daniel Rosenberg, SpaceIL, Israel

IAC-18.A3.2A.6
JAPANESE LUNAR POLAR EXPLORATION MISSION
Takeshi Hoshino, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.A3.2A.7
LUMIO: CHARACTERIZING LUNAR METEOROID IMPACTS WITH A CUBESAT
Francesco Topputo, Politecnico di Milano, Italy

IAC-18.A3.2A.8
FROM SINGLE AUTONOMOUS ROBOTS TO COOPERATIVE ROBOTIC TEAMS FOR FUTURE PLANETARY EXPLORATION MISSIONS
Armin Wedler, German Aerospace Center (DLR), Germany

IAC-18.A3.2A.9
OHB INSTRUMENTS DEVELOPMENT FOR VOLATILE SCOUTING ON THE MOON
Lutz Richter, OHB System AG - Munich, Germany

IAC-18.A3.2A.10
LUNAR SUPPORT SERVICES – A COMMERCIAL PARTNERSHIP FOR SUSTAINABLE EXPLORATION
Christopher Saunders, SSTL, United Kingdom

IAC-18.A3.2A.11
A MOON BASE WITH ACTIVE RADIATION SHIELDING
Giancarlo Genta, Politecnico di Torino, Italy

A3.2B. Moon Exploration – Part 2

October 2 2018, 14:45 — CCB Kaisen

Co-Chair(s): *Bernard Foing , ESA/ESTEC, ILEWG & VU Amsterdam, The Netherlands; David Korsmeyer , National Aeronautics and Space Administration (NASA), United States;*
Rapporteur(s): Nadeem Ghafoor , Canadensys Aerospace Corporation, Canada; Sylvie Espinasse , European Space Agency (ESA), The Netherlands;

IAC-18.A3.2B.1
TECHNOLOGY AND PRECURSOR MISSIONS TOWARDS A SUSTAINABLE MOON VILLAGE
Bernard Foing, ESA/ESTEC, ILEWG & VU Amsterdam, The Netherlands

IAC-18.A3.2B.2
PROSPECT: A NOVEL PACKAGE FOR SUBSURFACE SAMPLE ACQUISITION AND ANALYSIS OF LUNAR VOLATILES
Roland Trautner, European Space Agency (ESA), The Netherlands

IAC-18.A3.2B.4
ISPACE'S POLAR ICE EXPLORER: A COMMERCIAL ISRU EXPLORATION MISSION TO THE SOUTH POLE OF THE MOON.
Abigail Calzada-Diaz, ispace, Inc, Luxemburg

IAC-18.A3.2B.5
ILOA 2018 UPDATE: TWO MAIN MISSIONS, TWO PRECURSORS, GALAXY FORUM
Steve Durst, International Lunar Observatory Association, United States

IAC-18.A3.2B.6
RISING TO THE CHALLENGE OF NEW LUNAR EXPLORATION
Nadeem Ghafoor, Canadensys Aerospace Corporation, Canada

IAC-18.A3.2B.7
LUNAR IN-SITU RESOURCE UTILISATION (ISRU) DEMONSTRATION MISSION ACTIVITIES IN ESA'S EXPLORATION ENVELOPE PROGRAMME (E3P)
David Binns, European Space Agency (ESA), The Netherlands

IAC-18.A3.2B.8
LUNAR IN-SITU RESOURCE UTILIZATION ACTIVITIES BY AIRBUS
Marc Häming, Airbus Defence and Space, Germany

IAC-18.A3.2B.9
MACHINE LEARNING APPLICATIONS FOR SAFE AND EFFICIENT ROVER MOBILITY OPERATIONS AND PLANNING
Ewan Reid, Mission Control Space Services Inc., Canada

IAC-18.A3.2B.10
A MODULAR ASCENDER CONCEPT FOR SAMPLE RETURN MISSIONS
Robert Buchwald, Airbus Defence and Space, Germany

IAC-18.A3.2B.11
MIRA3D – A TERRESTRIAL ROBOTIC PROTOTYPE FOR MOBILE ADDITIVE LAYER MANUFACTURING OF LUNAR REGOLITH
Anna Voß, TU Braunschweig, Institute of Space Systems, Germany

A3.2C. Moon Exploration – Part 3

October 5 2018, 09:45 — CCB Kaisen

Co-Chair(s): *Bernard Foing , ESA/ESTEC, ILEWG & VU Amsterdam, The Netherlands; David Korsmeyer , National Aeronautics and Space Administration (NASA), United States;*
Rapporteur(s): *Nadeem Ghafoor , Canadensys Aerospace Corporation, Canada; Sylvie Espinasse , European Space Agency (ESA), The Netherlands;*

IAC-18.A3.2C.1
DEMONSTRATOR DESIGN FOR LUNAR IN SITU RESOURCE UTILISATION AND OXYGEN PRODUCTION
Michèle Lavagna, Politecnico di Milano, Italy

IAC-18.A3.2C.3
THERMAL CHARACTERIZATION OF SINTERED REGOLITH SIMULANT FOR THERMAL ENERGY STORAGE
Miranda Fateri, DLR (German Aerospace Center), Germany

IAC-18.A3.2C.4
DESIGN AND ASSESSMENT OF A SYSTEM FOR MOON ENERGY STORAGE AND GENERATION
Luca Celotti, Sonaca Space GmbH, Germany

IAC-18.A3.2C.5
TUBS-M AND TUBS-T - NEW LUNAR REGOLITH SIMULANTS ADAPTABLE TO LOCAL SURFACE CHARACTERISTICS
Stefan Linke, Technische Universität Braunschweig, Institute of Space Systems, Germany

IAC-18.A3.2C.6
END-TO-END MISSION DESIGN FOR MICROBIAL ISRU ACTIVITIES AS PREPARATION FOR A MOON VILLAGE
Benjamin Lehner, TU Delft, The Netherlands

IAC-18.A3.2C.7
AI OPTIMIZED ROBOTIC DESIGN FOR THE ARCHITECTURAL CONSTRUCTION OF A LUNAR HABITAT
Hatem Alaa Hussein, International Space University (ISU), France

IAC-18.A3.2C.8
HOW A LABORATORY ON THE MOON SHOULD BE EQUIPPED
Christiane Heinicke, ZARM, University of Bremen, Germany

IAC-18.A3.2C.9
DESIGN AND IMPLEMENTATION OF THERMAL CONTROL STRATEGY FOR MICRO-SIZE LUNAR EXPLORATION ROVER HAKUTO
Toshiki Tanaka, ispace, Inc, Japan

IAC-18.A3.2C.10
PAYLOAD DATA INTEGRITY ON LUNAR DATA PROCESSING MODULE USING ENCRYPTION AND AUTHENTICATION
SASI SAKETH KURRA, , India

IAC-18.A3.2C.11
A COST-EFFECTIVE PLAN TO ENABLE LUNAR EXPLORATION AND DEVELOPMENT
Robert Zubrin, Pioneer Astronautics, United States

IAC-18.A3.2C.12
LUNAR NIGHT SURVIVAL: POWER GENERATION AND DISTRIBUTION SOLUTIONS TO ENABLE A SUSTAINED HUMAN PRESENCE ON THE MOON
Rob Postema, ESA - European Space Agency, The Netherlands

A3.3A. Mars Exploration – missions current and future

October 3 2018, 09:45 — CCB Kaisen

Co-Chair(s): *Pierre W. Bousquet , Centre National d'Etudes Spatiales (CNES), France; Vincenzo Giorgio , Thales Alenia Space Italia, Italy;*
Rapporteur(s): *Amalia Ercoli Finzi , Politecnico di Milano, Italy; Cheryl Reed , The Johns Hopkins University Applied Physics Laboratory, United States;*

IAC-18.A3.3A.1 (non-confirmed)
STATUS AND OVERVIEW OF NASA'S INSIGHT MARS MISSION-- INSIGHT:[INTERIOR EXPLORATION USING SEISMIC INVESTIGATIONS, GEODESY AND HEAT TRANSPORT]
Ramon P. De Paula, National Aeronautics and Space Administration (NASA), United States

IAC-18.A3.3A.3
EXOMARS ROVER AND SURFACE PLATFORM MISSION: PREPARING THE SYSTEM INTEGRATION AND VERIFICATION PHASE
Bruno Musetti, Thales Alenia Space Italia, Italy

IAC-18.A3.3A.4
THE MARS RECONNAISSANCE ORBITER MISSION: 2018 STATUS
Martin Johnston, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States

IAC-18.A3.3A.5
MARS SAMPLE RETURN ARCHITECTURE ASSESSMENT STUDY
Simone Centuori, Elecnor Deimos, Spain

IAC-18.A3.3A.6
THE EARTH RETURN ORBITER MISSION AS PART OF AN INTERNATIONAL MARS SAMPLE RETURN CAMPAIGN
Jakob Huesing, Rhea for ESA, The Netherlands

IAC-18.A3.3A.7
MARS SAMPLE RETURN LANDER MISSION CONCEPT
Ashley Karp, Jet Propulsion Laboratory - California Institute of Technology, United States

IAC-18.A3.3A.8
MISSION DESIGN OF MARTIAN MOONS EXPLORATION (MMX)
Yasuhiro Kawakatsu, Japan Aerospace Exploration Agency (JAXA), ISAS, Japan

IAC-18.A3.3A.9
EXAMINING THE POSSIBLE USAGES OF MODULATING RETRO-REFLECTORS TO STUDY THE MARTIAN ATMOSPHERE: MISSION CONCEPT
Heyam Albloosh, United Arab Emirates Space Agency, United Arab Emirates

IAC-18.A3.3A.10
PLANETARY PROTECTION ON COSPAR CATEGORY IVB EXOMARS MISSION 2020
Diana Margheritis, Thales Alenia Space Italia, Italy

IAC-18.A3.3A.11
DEPHINE MISSION – EXPLORING THE MARTIAN MOONS OF DEIMOS AND PHOBOS – IN ESA'S COSMIC VISION PROGRAMME
Alison Gibbings, OHB System AG, Germany

A3.3B. Mars Exploration – Science, Instruments and Technologies

October 3 2018, 14:45 — CCB Kaisen

Co-Chair(s): *Pierre W. Bousquet , Centre National d'Etudes Spatiales (CNES), France; Vincenzo Giorgio , Thales Alenia Space Italia, Italy;*
Rapporteur(s): *Amalia Ercoli Finzi , Politecnico di Milano, Italy; Cheryl Reed, The Johns Hopkins University Applied Physics Laboratory, United States;*

IAC-18.A3.3B.1
DELIAN ARM DEVELOPMENT AND TEST FOR MARS SAMPLE ACQUISITION
Marco MOLINA, Leonardo Spa, Italy

IAC-18.A3.3B.2
DEVELOPMENT OF AN ULTRA-LIGHT ROBOTIC ARM FOR MARS EXPLORATION
Chunxu Yu, Beijing Institute of Control Engineering, China Academy of Space Technology, China

IAC-18.A3.3B.3 (non-confirmed)
FIELD & LABORATORY SPECTROSCOPY OF MARS ANALOGUE SAMPLES: SUPPORT TO MARS IN-SITU AND SAMPLE RETURN MISSIONS
Bernard Foing, ESA/ESTEC, ILEWG & VU Amsterdam, The Netherlands

IAC-18.A3.3B.4
FLIGHT-MODEL TEST RESULTS OF THE MECHANISM SUITE IN ESA'S EXOMARS ROVER ANALYTICAL LABORATORY DRAWER
Robert Paul, OHB System AG, Germany

IAC-18.A3.3B.5
SEIS ON HIS WAY TO MARS
Gabriel Pont, Centre National d'Etudes Spatiales (CNES), France

IAC-18.A3.3B.7
END-TO-END GNC DESIGN, TEST AND VALIDATION OF MARS PINPOINT LANDING WITH SUPERSONIC RETROPROPULSION
João Ferreira, Spin.Works S.A., Portugal

IAC-18.A3.3B.8
CALIBRATION AND PRELIMINARY TESTS OF EXOMARS 2020 BOTTLE (BRINE OBSERVATION TRANSITION TO LIQUID EXPERIMENT) FOR DEMONSTRATION OF LIQUID WATER STABILITY ON MARS
Miracle Israel Nazarious, Luleå University of Technology, Sweden

IAC-18.A3.3B.9
THERMODYNAMICS AS TOOL TO IDENTIFY WHERE AND WHEN TO SEARCH FOR PURE LIQUID WATER ON MARS
Aaron H. Persad, Massachusetts Institute of Technology (MIT), United States

IAC-18.A3.3B.10
CNES ROVER AUTONOMOUS NAVIGATION, APPLICATION TO EXOMARS AND POTENTIAL FOR MSR FETCH ROVER
Pierre W. Bousquet, Centre National d'Etudes Spatiales (CNES), France

IAC-18.A3.3B.11
COMARS+ INSTRUMENTATION PACKAGE OF THE EXOMARS SCHIAPARELLI LANDER AND ITS FLIGHT PERFORMANCE
Ali Gülhan, DLR (German Aerospace Center), Germany

IAC-18.A3.3B.12
EXPLORATION OF MARS THROUGH AN AUTONOMOUS AND MACHINE LEARNING ENABLED CONSTELLATION OF DRONES
Vipul Mani, , India

A3.4A. Small Bodies Missions and Technologies (Part 1)

October 4 2018, 09:45 — CCB Kaisen
Co-Chair(s): Stephan Ulamec , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Susan McKenna-Lawlor , Space Technology (Ireland) Ltd., Ireland;
Rapporteur(s): Marc D. Rayman , Jet Propulsion Laboratory - California Institute of Technology, United States; Norbert Frischauf, Austria;

IAC-18.A3.4A.1
DAWN'S SECOND AND FINAL EXTENDED MISSION: A NEW OPERATIONAL CAMPAIGN AT CERES
Marc D. Rayman, Jet Propulsion Laboratory - California Institute of Technology, United States

IAC-18.A3.4A.2
MASCOT: LATEST NEWS OF LANDING ON (162173) RYUGU
Tra Mi Ho, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Institute of Space Systems, Germany

IAC-18.A3.4A.4
DART: DOUBLE ASTEROID REDIRECTION TEST
Cheryl Reed, The Johns Hopkins University Applied Physics Laboratory, United States

IAC-18.A3.4A.5
HERA – THE EUROPEAN COMPONENT OF THE ASTEROID IMPACT DEFLECTION ASSESSMENT (AIDA)
Michael Küppers, ESA/ESAC, Spain

IAC-18.A3.4A.6
NEW KNOWLEDGE GAINED FROM THE HERA MISSION – THE EUROPEAN COMPONENT OF THE ASTEROID IMPACT AND DEFLECTION ASSESSMENT (AIDA) COOPERATION
Patrick Michel, University of Nice-Sophia Antipolis, CNRS, Observatoire de la Cote d'Azur, France

IAC-18.A3.4A.7
AIM AUTONOMOUS ASTEROID NAVIGATION
Aida Alcalde Barahona, G.M.V. Space and Defence, S.A., Spain

IAC-18.A3.4A.8
BINARY ASTEROID REDIRECTION: SCIENCE OPPORTUNITY FOR NANOSATS
Andrea Capannolo, Politecnico di Milano, Italy

A3.4B. Small Bodies Missions and Technologies (Part 2)

October 5 2018, 13:30 — CCB Kaisen
Co-Chair(s): Stephan Ulamec , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Susan McKenna-Lawlor , Space Technology (Ireland) Ltd., Ireland;
Rapporteur(s): Norbert Frischauf, SpaceTec Partners SPRL, Austria;

IAC-18.A3.4B.1
NUMERICAL MODELLING OF THE INTERNAL BALLISTICS OF A PYRO-DRIVEN LAUNCHER FOR HARPOON-BASED COMET SAMPLE ACQUISITION
Stefan Völk, DLR (German Aerospace Center), Germany

IAC-18.A3.4B.2
SIZE MATTERS - THE SHELL LANDER CONCEPT FOR EXPLORING MEDIUM-SIZE AIRLESS BODIES
Christian Grimm, German Aerospace Center (DLR), Bremen, Germany, Germany

IAC-18.A3.4B.3
TIDAL ACCELERATION GRAVITY GRADIOMETRY FOR MEASURING ASTEROID GRAVITY FIELD FROM ORBIT
Kieran Carroll, Gedex Inc., Canada

IAC-18.A3.4B.4
TIRI: A MULTI-PURPOSE THERMAL INFRARED PAYLOAD FOR PLANETARY EXPLORATION
Pierluigi Foglia Manzillo, Cosine Research BV, The Netherlands

IAC-18.A3.4B.5
IN SITU MEASUREMENTS OF REGOLITH PROPERTIES ON SMALL SOLAR SYSTEM BODIES USING SPACECRAFT/ROVER HYBRIDS
Lukasz Wisniewski, Space Research Centre (SRC), Poland

IAC-18.A3.4B.6
SMALL SPACECRAFT BASED MULTIPLE NEAR-EARTH ASTEROID RENDEZVOUS AND LANDING WITH NEAR-TERM SOLAR SAILS AND 'NOW-TERM' TECHNOLOGIES
Jan Thimo Grundmann, DLR (German Aerospace Center), Germany

IAC-18.A3.4B.7
ASTEROID RESOURCE EXPLORATION MISSION BY RECONNAISSANCE AND LANDED INVESTIGATION
Yonghe Zhang, Shanghai Engineering Center for Microsatellites, China

IAC-18.A3.4B.8
AN INSTRUMENT PROTOTYPE FOR OPTICAL GRAVIMETRY DURING ASTEROID FLYBYS
Justin Atchison, The Johns Hopkins University Applied Physics Laboratory, United States

A3.5. Solar System Exploration

October 4 2018, 14:45 — CCB Kaisen
Co-Chair(s): Junichiro Kawaguchi , Japan Aerospace Exploration Agency (JAXA), Japan; Mariella Graziano , GMV Aerospace & Defence SAU, Spain;
Rapporteur(s): Alain Ouellet , Canadian Space Agency, Canada; Charles E. Cockrell Jr. , National Aeronautics and Space Administration (NASA), United States;

IAC-18.A3.5.1
AERODYNAMIC PERFORMANCE ENHANCEMENT STRATEGIES FOR PASSIVE TETHER-SAIL TRAJECTORY GUIDANCE SYSTEMS FOR EXTRA-TERRESTRIAL BALLOON SYSTEMS
Christopher Yoder, North Carolina State University, United States

IAC-18.A3.5.2
"TO VENUS TOGETHER": RUSSIAN-AMERICAN JOINT ENCORE OF VENUS RESEARCHES WITH ORBITER, LANDER AND ATMOSPHERIC PROBES IN THE PROJECT "VENUS-D"
Sergei Fedorovich Teselkin, Lavochkin Association, Russian Federation

IAC-18.A3.5.3
PENETRATING PLANETS' SUBSURFACE – LESSONS LEARNT FROM HAMMERING MECHANISMS FOR INSIGHT HP3 AND LUNARDRILL
Jerzy Grygorczuk, Astronika, Poland

IAC-18.A3.5.4
MAJIS AND JANUS: TWO INSTRUMENTS FOR JUPITER EXPLORATION ON-BOARD JUICE
Marco MOLINA, Leonardo Spa, Italy

IAC-18.A3.5.5
EXPLORING EUROPA AND ENCELADUS: A COMPARATIVE STUDY
Harriet Brettle, California Institute of Technology, United States

IAC-18.A3.5.6
ICY GIANT PLANET EXPLORATION: ARE ENTRY PROBES ESSENTIAL?
Sushil Atreya, University of Michigan, United States

IAC-18.A3.5.7
AUTONOMOUS IN-ICE EXPLORATION OF THE SATURNIAN MOON ENCELADUS
Joachim Clemens, University of Bremen, Germany

IAC-18.A3.5.8 (non-confirmed)
PSO BASED SIMULATION OPTIMIZATION FOR RANGE OF ENCELADUS EXPLORING
Ming Tie, Science and Technology on Space Physics Laboratory, China

IAC-18.A3.5.9
ENVIRONMENT-ADAPTIVE AND MULTI-MODAL MOBILE ROBOT
Nijanthan Vasudevan, , India

IAC-18.A3.5.10
EFFICIENT PLANETARY PROTECTION ANALYSIS FOR INTERPLANETARY MISSIONS
Matteo Romano, Politecnico di Milano, Italy

IAC-18.A3.5.11
THE INTERNATIONAL PLANETARY PROTECTION HANDBOOK (IPPH)
Alissa Haddaji, COSPAR, France

IAC-18.A3.5.12
THE CHALLENGES OF INTEGRATING THE PARKER SOLAR PROBE OBSERVATORY
Timothy Cole, The Johns Hopkins University Applied Physics Laboratory, United States

A4. 47th IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The Next Steps

Coordinator(s): Claudio Maccone , International Academy of Astronautics (IAA) and Istituto Nazionale di Astrofisica (INAF), Italy;

A4.1. SETI 1: SETI Science and Technology

October 2 2018, 14:45 — ÖVB 3
Co-Chair(s): Bill Diamond , SETI Institute, United States; Michael Albert Garrett , University of Manchester, United Kingdom;
Rapporteur(s): Andrew Siemion , University of California / ASTRON / Radboud University, United States;

IAC-18.A4.1.1
THE BREAKTHROUGH LISTEN SEARCH FOR INTELLIGENT LIFE: THE FIRST SETI RESULTS AND OTHER FUTURE PROJECTS.
J. Emilio Enriquez, UC Berkeley / Radboud University Nijmegen, United States

IAC-18.A4.1.2
AN UPDATE THE AUSTRALIAN ACTIVITIES OF BREAKTHROUGH LISTEN
Daniel Price, U.C. Berkeley, United States

IAC-18.A4.1.3
SETI RADIO SURVEYS OF THE DISTANT UNIVERSE
Mike Garrett, University of Manchester, United Kingdom

IAC-18.A4.1.5
LOW COST SETI DATA MULTI-PROCESSING. S.MONTEBUGNOLI
Roberto Lulli, INAF - IRA, Italy

IAC-18.A4.1.6 (non-confirmed)
QKLT: KARHUNEN-LOEVE TRANSFORM ON QUANTUM COMPUTING
Francesco Schillirò, INAF, Italy

IAC-18.A4.1.7
THE "VANISHING & APPEARING SOURCES DURING A CENTURY OF OBSERVATIONS" (VASCO) PROJECT -- CURRENT STATUS
Beatriz Villarroel, Uppsala University, Sweden

IAC-18.A4.1.8
A NOVEL APPROACH FOR INTERSTELLAR COMMUNICATION BASED ON MODULATED X-RAY BEAMS
Shuang Hang, Nanjing University of Aeronautics and Astronautics, China

IAC-18.A4.1.9
INAF-UC BERKELEY COLLABORATION FOR SETI
Andrea Melis, INAF - Istituto Nazionale di AstroFisica, Italy

IAC-18.A4.1.10
MICRO-PIXEL METROLOGY FOR PRECISION ASTROMETRY DETECTION ON NEARBY TERRESTRIAL PLANETS
Ding Chen, Chinese Academy of Space Technology, China

IAC-18.A4.1.11
MODELING FAST RADIO BURSTS USING THE KLT
Nicolò Antonietti, , Italy

A4.2. SETI 2: SETI and Society

October 5 2018, 13:30 — ÖVB 3
Co-Chair(s): Denise Herzing , , United States; John Elliott , Leeds Beckett University, United Kingdom;
Rapporteur(s): J. Emilio Enriquez , UC Berkeley / Radboud University Nijmegen, United States;

IAC-18.A4.2.1
REVIEW OF THE SETI POST-DETECTION AND REPLY PROTOCOLS: CURRENT ACTIONS AND DEVELOPMENTS
Leslie I. Tennen, Law Offices of Sterns and Tennen, United States

IAC-18.A4.2.2 (non-confirmed)
A POST-DETECTION STRATEGY: PROPOSING A NEW IMPETUS AND FRAMEWORK FOR SETI
John Elliott, Leeds Beckett University, United Kingdom

IAC-18.A4.2.4
DARK MATTER VS GREY MATTER OR THE PROBLEM OF NON TERRESTRIAL INTELLIGENCE (NTI) SILENCE.
Gabriel G. De la Torre, University of Cádiz, Spain

IAC-18.A4.2.5
ENTROPY AND ENERGY OF LIFE AND CIVILIZATIONS MODELLED BY EVO-SETI THEORY
Claudio Maccone, International Academy of Astronautics (IAA) and Istituto Nazionale di Astrofisica (INAF), Italy

IAC-18.A4.2.6
PERCEPTION OF SPACESHIPS IN SETI RESEARCH AND POTENTIAL FOR SPACEFLIGHT TECHNOLOGY
Ugur Guven, UN CSSTEAP, United States

IAC-18.A4.2.8
A CRITICAL REVIEW ON THE ASSUMPTIONS OF SETI
Kelvin Long, Initiative for Interstellar Studies, United Kingdom

IAC-18.A4.2.11
CELEBRATING 40 YEARS OF HITCHIKER'S HOW SCIENCE FICTION INSPIRES THE WAY TO SETI
Mohita Chandramani, University of Petroleum and Energy Studies, India

IAC-18.A4.2.12
SETI TRANSLATED INTO FRENCH
Elisabeth Piotelat, CNRS, France

A5. 21st IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM

Coordinator(s): *Christian Sallaberger , Canadensys Aerospace Corporation, Canada; Maria Antonietta Perino , Thales Alenia Space Italia, Italy;*

A5.1. Human Exploration of the Moon and Cislunar Space

October 3 2018, 14:45 — ZARM 3

Co-Chair(s): *Michael Raftery , Boeing Defense Space & Security, United States; Nadeem Ghafoor , Canadensys Aerospace Corporation, Canada;*
Rapporteur(s): *Marc Haese , DLR, German Aerospace Center, Germany;*

IAC-18.A5.1.1
LUNAR EXPLORATION CAMPAIGN: DEVELOPMENT OF THE LUNAR ORBITAL PLATFORM-GATEWAY AND ESTABLISHING THE CISLUNAR AND SURFACE ARCHITECTURE
Jason Crusan, National Aeronautics and Space Administration (NASA), United States

IAC-18.A5.1.2
THE ISS PARTNERSHIP AND HUMAN EXPLORATION IN CISLUNAR SPACE AND ON THE MOON
Kirk Shireman, NASA Johnson Space Center, United States

IAC-18.A5.1.4
CONCEPT FOR A CREWED LUNAR LANDER OPERATING FROM THE LUNAR ORBITING PLATFORM-GATEWAY
Timothy Cichan, Lockheed Martin Corporation, United States

IAC-18.A5.1.5
LUNAR OUTPOST SUSTAINING HUMAN SPACE EXPLORATION BY UTILIZING IN-SITU RESOURCES WITH A FOCUS ON PROPELLANT PRODUCTION
Paolo Guardabasso, Politecnico di Torino, Italy

IAC-18.A5.1.6
MISSION ARCHITECTURE FOR HUMAN EXPLORATION OF CIS-LUNAR SPACE VIA TELE-OPERATED ASSETS
Davide Conte, The Pennsylvania State University, United States

IAC-18.A5.1.7 (non-confirmed)
MOONVILLAGE CONCEPTS & DESIGNS TOWARDS A SUSTAINABLE AND PERMANENT HUMAN LUNAR BASE
Bernard Foing, ESA/ESTEC, ILEWG & VU Amsterdam, The Netherlands

IAC-18.A5.1.8
ENVISIONING THE MOON VILLAGE – A SPACE ARCHITECTURAL APPROACH
Sandra Haeuplik-Meusburger, Vienna University of Technology, Austria

IAC-18.A5.1.9
EXPLORING THE TECHNICAL/ECONOMICAL FEASIBILITIES AND SOCIAL/LEGISLATIVE ISSUES OF ESTABLISHING A COMMERCIAL ENTITY AND THE FIRST INTERPLANETARY HOTEL ON THE LUNAR SURFACE IN THE EARLY 2030S
Mina Takla, CosmoX, Russian Federation

IAC-18.A5.1.10
GOVERNANCE PRINCIPLES FOSTERING THE MOON VILLAGE VISION
Ruth McAvinia, ATG Europe B.V., Ireland

IAC-18.A5.1.11
ORBITAL SPACEPORT – A NEW PROFESSION FOR THE EARTH-ORBIT SPACE STATIONS
Yury Makushenko, S.P. Korolev Rocket and Space Corporation Energia, Russian Federation

IAC-18.A5.1.12
PROTOTYPING OF LUNAR SURFACE GEOLOGICAL SAMPLING TOOLS FOR MOON SPACEWALK SIMULATIONS BY ESA
Dorota Budzyn, European Space Agency - Astronaut Training Center, Germany

IAC-18.A5.1.13
THE UTILIZATION OF LAVA TUNNELS BENEATH THE LUNAR SURFACE AS HABITATIONS FOR HUMANS IN FUTURE MANNED MISSIONS TO THE MOON, OR INDEED AS PERMANENT LUNAR BASES.
Ben Watts, University College London (UCL), United Kingdom

IAC-18.A5.1.14
UPDATED DESIGN CONCEPTS OF THE MOON AND MARS BASE ANALOG (MAMBA)
Christiane Heinicke, ZARM, University of Bremen, Germany

A5.2. Human Exploration of Mars

October 3 2018, 09:45 — ZARM 3

Co-Chair(s): *Kathy Laurini , National Aeronautics and Space Administration (NASA), United States; Maria Antonietta Perino , Thales Alenia Space Italia, Italy;*
Rapporteur(s): *Norbert Frischauf, Austria;*

IAC-18.A5.2.2
HUMAN EXPLORATION OF THE MOON, NEAR-EARTH ASTEROIDS, AND MARS USING STAGING FROM EARTH-MOON L-2 ORBITS AND PHASING ORBIT RENDEZVOUS
David Dunham, Kinetx, Inc., United States

IAC-18.A5.2.3
EUROPEAN MARS MISSION ARCHITECTURE USING AN ENHANCED ARIANE LAUNCHER
Jean-Marc Salotti, Laboratoire de l'Intégration du Matériau au Système, France

IAC-18.A5.2.4
HUMAN MARS MISSIONS PERFORMED USING SOLAR ELECTRIC PROPULSION
Giancarlo Genta, Politecnico di Torino, Italy

IAC-18.A5.2.7
MISSION ARCHITECTURE FOR A MANNED MARS POLAR RESEARCH BASE
Anne-Marlene Rüede, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland

IAC-18.A5.2.7
MEDICAL AUTONOMY AS PREREQUISITE FOR DEEP SPACE TRAVEL WILL BENEFIT FROM TERRESTRIAL HEALTHCARE INNOVATION
Jules Lancee, , The Netherlands

IAC-18.A5.2.8
EVALUATING THE SUSTAINABILITY OF LONG TERM MANNED MARS CAMPAIGNS USING A PHYSICAL ECONOMICS FRAMEWORK
George Lordos, Massachusetts Institute of Technology (MIT), United States

IAC-18.A5.2.9
SIMULATING OXYGEN PRODUCTION ON MARS FOR MOXIE (MARS OXYGEN IN-SITU RESOURCE UTILIZATION EXPERIMENT)
Eric Hinterman, Massachusetts Institute of Technology (MIT), United States

IAC-18.A5.2.11
CIRA ROADMAP FOR THE DEVELOPMENT OF MARS INFRASTRUCTURE
NUNZIA FAVALORO, CIRA Italian Aerospace Research Centre, Italy

IAC-18.A5.2.12
MOHAB: MOBILE SIMULATION PLATFORM FOR FUTURE MOON AND MARS MISSIONS
Jedrzej Gorski, Wroclaw University of Science and Technology, Poland

IAC-18.A5.2.13
THE IMPORTANCE OF MARS ANALOGUE MISSION "MARS-160" FOR THE HUMAN EXPLORATION OF MARS
Anastasia Stepanova, , Russian Federation

IAC-18.A5.2.14
DESIGNING A SELF-SUSTAINABLE HABITAT CAPABLE OF SUPPORTING LIFE ON MARS.
Aman Arora, University of Petroleum and Energy Studies, India

IAC-18.A5.2.15 (non-confirmed)
INTERIOR DESIGN AND ERGONOMIC STUDIES OF SCIENCE MODULE FOR THE MOON AND MARS BASE ANALOG (MAMBA)
Leszek Orzechowski, Wroclaw University of Science and Technology, Poland

A5.3-B3.6. Human and Robotic Partnerships in Exploration - Joint session of the Human Spaceflight and Exploration Symposia

October 4 2018, 14:45 — ZARM 4

Co-Chair(s): *Christian Sallaberger , Canadensys Aerospace Corporation, Canada;*
Rapporteur(s): *Mark Hempsell , The British Interplanetary Society, United Kingdom;*

IAC-18. A5.3-B3.6.1
ASTROBEE: CURRENT STATUS AND FUTURE USE AS AN INTERNATIONAL RESEARCH PLATFORM
Andres Mora Vargas, NASA Ames Research Center, United States

IAC-18.A5.3-B3.6.2
GNC SYSTEM DESIGN FOR THE CREW INTERACTIVE MOBILE COMPANION (CIMON)
Valerie Schröder, Airbus DS GmbH, Germany

IAC-18.A5.3-B3.6.3
TELEROBOTIC OPERATIONS WITH TIME DELAY, RESULTS FROM THE ISECG GAP ASSESSMENT TEAM
Laurie Metcalfe, Canadian Space Agency, Canada

IAC-18.A5.3-B3.6.5
THE ROBOT AS AN AVATAR OR CO-WORKER? AN INVESTIGATION OF THE DIFFERENT TELEOPERATION MODALITIES THROUGH THE KONTUR-2 AND METERON SUPVIS JUSTIN SPACE TELEROBOTIC MISSIONS
Neal Lii, German Aerospace Center (DLR), Germany

IAC-18.A5.3-B3.6.7
QUANTIFYING PERFORMANCE IN HUMAN-ROBOTIC INTEGRATED OPERATIONS FOR SPACEFLIGHT APPLICATIONS: A MISSION-DRIVEN APPROACH
Shahrzad Hosseini, European Space Agency (ESA), The Netherlands

IAC-18.A5.3-B3.6.8
THE DEVELOPMENT OF VIRTUAL REALITY DEMONSTRATOR FOR ROBOTICS TRAINING AT THE EUROPEAN ASTRONAUT CENTRE
Sander Coene, ESA, Germany

IAC-18.A5.3-B3.6.9
A SYMBIOTIC HUMAN AND MULTI-ROBOT PLANETARY EXPLORATION SYSTEM
Jacopo Panerati, Ecole Polytechnique de Montreal, Canada

IAC-18.A5.3-B3.6.10 (non-confirmed)
HUMAN ROBOTIC PARTNERSHIP INVESTIGATIONS DURING ILEWG EUROMOONMARS SIMULATION CAMPAIGNS 2016-2018
Bernard Foing, ESA/ESTEC, ILEWG & VU Amsterdam, The Netherlands

IAC-18.A5.3-B3.6.11
RESEARCH ON BRAIN-ACTUATED ROBOTIC IN HUMAN SPACEFLIGHT ENDEAVORS
Chuanfeng Wei, Institute of Manned Space System Engineering,China Academy of Space Technology (CAST), China

A5.4-D2.8. Space Transportation Solutions for Deep Space Missions

October 5 2018, 09:45 — CCB Lloydsaal

Co-Chair(s): *Andrew Aldrin , Florida Institute of Technology, United States; Ernst Messerschmid , University of Stuttgart, Germany; K. Bruce Morris , RUAG Space, United States;*
Rapporteur(s): *Gerhard Schwehm , European Space Agency (ESA), The Netherlands;*

IAC-18.A5.4-D2.8.1
PAYLOAD UTILIZATION IN NASA'S SPACE LAUNCH SYSTEM
Steve Creech, National Aeronautics and Space Administration (NASA), United States

IAC-18.A5.4-D2.8.3
SPACE TRANSPORTATION VEHICLES FOR CARGO DELIVERY TO THE ORBITS OF SMALL CELESTIAL BODIES
Oleg Sergeevich Grafodatsky, Lavochkin Association, Russian Federation

IAC-18.A5.4-D2.8.4
AN ANALYSIS AND SELECTION OF LAUNCH WINDOWS AND ORBITAL TRAJECTORIES FOR THE JESSE OWENS THERMONUCLEAR PROPULSION INTERPLANETARY SPACEFLIGHT MISSION
Taylor Huneycutt, The Ohio State University College of Engineering, United States

IAC-18.A5.4-D2.8.5
ANALYSIS OF NUCLEAR THERMAL PROPULSION (NTP) ENABLED HELIOPAUSE TRAJECTORIES, USING SOLAR-OBERTH MANEUVERS AND INNER PLANETARY GRAVITY ASSIST
Dennis Scott, The Ohio State University, United States

IAC-18.A5.4-D2.8.6
DESIGN AND OPTIMIZATION OF TRANSFER OF RESOURCES FROM THE LUNAR SURFACE TO LUNAR ORBIT
Giovanni Artuso, Politecnico di Torino, Italy

IAC-18.A5.4-D2.8.7
DEEP SPACE TRANSPORTATION ENHANCED BY 20KW-CLASS HALL EFFECT THRUSTER
Christopher Andrea Paissoni, Politecnico di Torino, Italy

IAC-18.A5.4-D2.8.8
A NOVEL METHOD FOR MANNED ASTEROIDS LANDING MISSION SCALE ANALYSIS BASED ON MISSION ARCHITECTURE MATRIX
Yuxian Yue, Beihang University, China

IAC-18.A5.4-D2.8.10
EXPLOITING A HIGH-POWER ELECTRIC SPACE TUG TO SUPPORT THE DEEP SPACE GATEWAY
Martina Mammarella, Politecnico di Torino, Italy

IAC-18.A5.4-D2.8.11
RESEARCH ON THE PRELIMINARY CONCEPTUAL DESIGN OF ORBIT TRANSFER VEHICLE BASED ON NUCLEAR THERMAL POWER
Dong Zhang, National Key Laboratory of Aerospace Flight Dynamics,Northwestern Polytechnical University,Xi'an,, China

A6. 16th IAA SYMPOSIUM ON SPACE DEBRIS

Coordinator(s): *Christophe Bonnal , Centre National d'Etudes Spatiales (CNES), France; J.-C. Liou , National Aeronautics and Space Administration (NASA), United States;*

A6.1. Space Debris Detection, Tracking and Characterization

October 1 2018, 15:00 — ZARM 1

Co-Chair(s): *Frank Di Pentino , Integrity Applications Incorporated (IAI), United States; Thomas Schildknecht , Astronomical Institute University of Bern (AIUB) / SwissSpace Association, Switzerland;*
Rapporteur(s): *Vladimir Agapov , Russian Academy of Sciences, Russian Federation;*

IAC-18.A6.1.1
DISCOVERY AND CHARACTERIZATION OF FAINT SPACE DERBIS BY NEW 50 CM TELESCOPE IN CHILE
Vladimir Agapov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-18.A6.1.2
CHARACTERISATION OF SPACE DEBRIS THROUGH THE ANALYSIS OF ON-SKY POLARIMETRIC SIGNATURES OBTAINED WITH A MICROPOLARISER ARRAY IMAGE SENSOR
Manuel Cegarra Polo, University of New South Wales, Australia

IAC-18.A6.1.3
ANALYSIS OF TEMPORAL EVOLUTION OF DEBRIS OBJECTS' ROTATION RATES INSIDE AIUB LIGHT CURVE DATABASE
Abdul Rachman, Astronomical Institute University of Bern (AIUB), Switzerland

IAC-18.A6.1.5
UTILIZATION OF BROADBAND ARRAY SPECTROGRAPH SYSTEM (BASS) THERMAL IR OBSERVATIONS OF GEOSYNCHRONOUS EARTH ORBIT (GEO) OBJECTS IN THE CREATION OF AN OBSERVATION-BASED MODEL OF THEIR THERMAL EMISSION
Mark A. Skinner, , United States

IAC-18.A6.1.6
SMARTNET™ - EVOLUTION AND RESULTS
Hauke Fiedler, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.A6.1.7
OPTICAL IN-SITU MONITOR - A BREADBOARD SYSTEM TO ENABLE SPACE-BASED OPTICAL OBSERVATIONS OF SPACE DEBRIS
Jens Utzmann, Airbus DS GmbH, Germany

IAC-18.A6.1.8
NEAR REAL TIME SPACE-BASED SPACE DEBRIS DETECTION BASED ON PARALLEL IMAGE PROCESSING PIPELINE
Francesco Diprima, Planetek Italia, Italy

IAC-18.A6.1.9
A REAL-TIME SPACE DEBRIS DETECTION SYSTEM FOR BIRALES
Denis Cutajar, , Malta

A6.2. Modelling and Risk Analysis

October 2 2018, 09:45 — ZARM 1

Co-Chair(s): *Daniel Oltrogge , Analytical Graphics, Inc., United States; Luciano Anselmo , ISTI-CNR, Italy;*
Rapporteur(s): *Marlon Sorge , The Aerospace Corporation, United States;*

IAC-18.A6.2.1
A "WORN-OUT NET" MODEL FOR ANALYSIS OF CONFLICTS IN A MULTITUDE OF ORBITAL OBJECTS
Tatyana V. Labutkina, Dnepropetrovsk National University named after Oles' Gonchar, Ukraine

IAC-18.A6.2.2
ESTIMATION OF ORBITAL ENVIRONMENT INCORPORATING ENVIRONMENTAL CHANGE DUE TO MAJOR BREAKUPS UTILIZING IN-SITU MEASUREMENTS
Masahiro Furumoto, Kyushu University, Japan

IAC-18.A6.2.3
DEMISABILITY OF CRITICAL SPACECRAFT COMPONENTS DURING ATMOSPHERIC RE-ENTRY
Patrik Kärräng, Hypersonic Technology Göttingen, Germany

IAC-18.A6.2.5
IMPROVED REPRESENTATION OF DESTRUCTIVE SPACECRAFT RE-ENTRY FROM ANALYSIS OF HIGH ENTHALPY WIND TUNNEL TESTS OF SPACECRAFT STRUCTURES AND EQUIPMENT
James Beck, Belstead Research Ltd, United Kingdom

IAC-18.A6.2.6
PARTICLE FLUX ANALYSIS WITH THE UPDATED MASTER MODEL
Carsten Wiedemann, TU Braunschweig, Institute of Space Systems, Germany

IAC-18.A6.2.8
EXPECTED COLLISION AVOIDANCE MANOEUVRE RATES IN DRAMA-ARES BASED ON A HISTORY OF CONJUNCTION DATA MESSAGES
Vitali Braun, IMS Space Consultancy, Germany

IAC-18.A6.2.9
ASSESSING POTENTIAL FOR CROSS-CONTAMINATING BREAKUP EVENTS FROM LEO TO GEO
Darren McKnight, Integrity Applications Incorporated (IAI), United States

IAC-18.A6.2.10
EFFECTS OF PASSIVE DE-ORBITING THROUGH DRAG AND SOLAR SAILS AND ELECTRODYNAMIC TETHERS ON THE SPACE DEBRIS ENVIRONMENT
Camilla Colombo, Politecnico di Milano, Italy

IAC-18.A6.2.11
EXAMINATION OF DEBRISAT FRAGMENT CHARACTERISTICS FOR IMPROVED FRAGMENTATION MODELING
Marlon Sorge, The Aerospace Corporation, United States

A6.3. Impact-Induced Mission Effects and Risk Assessments

October 3 2018, 09:45 — ZARM 1

Co-Chair(s): *Frank Schaefer , Fraunhofer - Institut für Kurzzeitdynamik, Ernst-Mach-Institut (EMI), Germany; Norman Fitz-Coy , University of Florida, United States;*
Rapporteur(s): *Darren McKnight , Integrity Applications Incorporated (IAI), United States;*

IAC-18.A6.3.1
EXPERIMENTAL STUDY ON PERFORMANCES FOR THE DIFFERENT GRADED-IMPEDANCE DISTRIBUTION MATERIALS
Guangming Song, China Academy of Space Technology (CAST), China

IAC-18.A6.3.2
CHARACTERISTICS OF MICROWAVE EMISSIONS FROM HYPERVELOCITY IMPACTS ON PURE ALUMINUM AND VARIOUS ALUMINUM ALLOY PLATES
Yuki Mando, The Graduate University for Advanced Studies, Japan

IAC-18.A6.3.3
ORBITAL DEBRIS RISK ASSESSMENT OF HARNESSING: COMPARING ALUMINUM PLATE BALLISTIC LIMIT EQUATION PREDICTIONS TO TEST DATA
James Chinn, NASA Jet Propulsion Laboratory, United States

IAC-18.A6.3.4
CHARACTERIZING DEBRISAT FRAGMENTS -- PRELIMINARY RESULTS
Samantha Allen, University of Florida, United States

IAC-18.A6.3.5
MEASURING IMPACT CRATERS ON THE ISS COLUMBUS MODULE
Robin Putzar, Fraunhofer EMI, Germany

IAC-18.A6.3.6
RESEARCH ON THE NEW FAILURE PROBABILITY ANALYSIS METHOD IMPACTED BY SPACE DEBRIS
Shi Jiawei, China Aerodynamics Research and Development Center (CARDC) , China

IAC-18.A6.3.7
EXPERIMENTAL CHARACTERIZATION OF MULTI-LAYER 3D-PRINTED SHIELDS FOR MICROSATELLITES
Lorenzo Olivieri, CISAS – "G. Colombo" Center of Studies and Activities for Space, University of Padova, Italy

IAC-18.A6.3.8
CROSS-VALIDATION OF THE METEOROID AND ORBITAL DEBRIS RISK AND DAMAGE ASSESSMENT TOOLS ESABASE2/DEBRIS AND BUMPER
Anatoli Miller, Etamax Space GmbH, Germany

IAC-18.A6.3.9
CST: A NEW SEMI-EMPIRICAL TOOL FOR SIMULATING SPACECRAFT COLLISIONS IN ORBIT
Alessandro Francesconi, University of Padova - DII/CISAS, Italy

IAC-18.A6.3.10
MODELING OF THE IMPACT MICROMETEOROID AND ORBITAL DEBRIS ON THE MICROMETEOROIDS AND DEBRIS PROTECTION SYSTEM FOR INFLATABLE MODULES FOR LUNAR ORBITAL APPLICATION
Natalia Goldenko, TSNIIMASH, Russian Federation

A6.4. Mitigation and Standards : status, lessons learnt and future with smallsats and constellations

October 2 2018, 14:45 — ZARM 1

Co-Chair(s): *Holger Krag , European Space Agency (ESA), Germany; Pierre Omaly , CNES, France;*
Rapporteur(s): *Igor Usovik , Central Research Institute of Machine Building (TSNIIMASH), Russian Federation;*

IAC-18.A6.4.1
IMPACTS OF SPACE DEBRIS MITIGATION REQUIREMENTS ON SPACECRAFT DESIGN IN AIRBUS DEFENCE AND SPACE
Daniel Briot, Airbus Defence and Space, France

IAC-18.A6.4.2
APPLICATION OF A DEBRIS INDEX FOR GLOBAL EVALUATION OF MITIGATION STRATEGIES
Francesca Letizia, European Space Agency (ESA), Germany

IAC-18.A6.4.3
ORBITAL LIFETIME AND COLLISION RISK REDUCTION FOR INCLINED GEOSYNCHRONOUS DISPOSAL ORBITS
Alan B. Jenkin, The Aerospace Corporation, United States

IAC-18.A6.4.4
ANALYTICAL APPROACH FOR REENTRY ANALYSIS AND DESIGN FOR DEMISE ASSESSMENTS
Antonio Caiazzo, International Space University (ISU), France

IAC-18.A6.4.5
ZENITH" LV UPPER STAGE PASSIVATION FOR SPACE DEBRIS MITIGATION MODERN REQUIREMENTS COMPLIANCE
Sergii Kuda, Yuzhnoye State Design Office, Ukraine

IAC-18.A6.4.6
RESULTS FROM THE H2020 REDSHIFT PROJECT: A GLOBAL APPROACH TO SPACE DEBRIS MITIGATION
Alessandro Rossi, IFAC-CNR, Italy

IAC-18.A6.4.7
GEO SATELLITES END-OF-LIFE DISPOSAL – COMPLIANCE STATUS
Pablo Minguijon Pallas, Delft University of Technology (TU Delft), Spain

IAC-18.A6.4.8
SPACE DEBRIS: ANALYSIS OF A LARGE CONSTELLATION AT 1200 KM ALTITUDE
Gian Luigi Somma, University of Southampton, United Kingdom

IAC-18.A6.4.9
DE-ORBITING SMALL SPACE DEBRIS THROUGH SPACE-BASED LASER SYSTEM: THE CASE OF NANO- AND PICO-SATELLITES FLEET
Shambo Bhattacharjee, University of Leeds, United Kingdom

A6.5. Post Mission Disposal and Space Debris Removal (1)

October 4 2018, 09:45 — ZARM 1

Co-Chair(s): *Fabrizio Piergentili , Sapienza University of Rome, Italy; Laurent Francillout , CNES, France;*
Rapporteur(s): *Fabio Santoni , Sapienza University of Rome, Italy;*

IAC-18.A6.5.1
REMOVEDEBRIS PRELIMINARY MISSION RESULTS
Guglielmo Aglietti, Surrey Space Centre, University of Surrey, United Kingdom

IAC-18.A6.5.2
INFLATESAIL DE-ORBIT FLIGHT DEMONSTRATION RESULTS AND FOLLOW-ON DRAG-SAIL APPLICATIONS
Craig Underwood, Surrey Space Centre, University of Surrey, United Kingdom

IAC-18.A6.5.3
THE ADEO PASSIVE DE-ORBIT SUBSYSTEM: REFERENCE MISSION SELECTION AND PRELIMINARY DESIGN OF PROTO FLIGHT MODEL
Thomas Sinn, HPS GmbH, Germany

IAC-18.A6.5.4
HARDWARE AND GNC SOLUTIONS FOR CONTROLLED SPACECRAFT RE-ENTRY USING AERODYNAMIC DRAG
Sanny Omar, University of Florida, United States

IAC-18.A6.5.5
MODELLING AND COMBINED CONTROL OF A SATELLITE WITH A ROBOT ARM FOR ACTIVE DEBRIS REMOVAL
Matthias Reiner, DLR (German Aerospace Center), Germany

IAC-18.A6.5.6
THE SEMI-CONTROLLED RE-ENTRY: DEVELOPMENT OF A SIMULATOR AND FEASIBILITY STUDY
Anthea Evelina Comellini, ISAE, France

IAC-18.A6.5.7
INERTIA ESTIMATION OF TUMBLING SPACE DEBRIS VIA TENTATIVE CONTACTS BEFORE CAPTURING
Chuan Ma, National Key Laboratory of Aerospace Flight Dynamic, Northwestern Polytechnical University, China

IAC-18.A6.5.8
SAFE OPERATIONS IN PROXIMITY OF SPACE DEBRIS: RELATIVE MOTION DESIGN AND POSE ESTIMATION
Roberto Opromolla, University of Naples "Federico II", Italy

IAC-18.A6.5.9
CHALLENGES OF DEVELOPING A SOLID ROCKET MOTOR FOR DIRECT DEORBITATION
Pawel Nowakowski, Institute of Aviation, Poland

IAC-18.A6.5.10
DATA ANALYSIS OF THE MEDUSA DEVICE IN VACUUM CHAMBER AND ATMOSPHERIC ENVIRONMENTS.
Louis Wei-yu Feng, University of Cape Town, South Africa

A6.6. Post Mission Disposal and Space Debris Removal (2)

October 4 2018, 14:45 — ZARM 1

Co-Chair(s): *Balbir Singh , Manipal Institute of Technology, Manipal Academy of Higher Education, India; Nicolas Bérend , ONERA - The French Aerospace Lab, France;*
Rapporteur(s): *Luca Rossettini , D-Orbit, Italy;*

IAC-18.A6.6.1
INSIDER, INNOVATIVE NET & SPACE INFLATABLE STRUCTURE FOR ACTIVE DEBRIS REMOVAL
Cedric Dupont, BERTIN Technologies, France

IAC-18.A6.6.2
METHODOLOGY AND RESULTS OF HIGH ENTHALPY WIND TUNNEL AND STATIC DEMISABILITY TESTS FOR EXISTING S/C STRUCTURAL JOINING TECHNOLOGIES
Mark Fittock, OHB System AG, Germany

IAC-18.A6.6.3
ADAPTIVE OPTICS FOR TRACKING AND PUSHING SPACE DEBRIS: PERFORMANCE OF THE ADAPTIVE OPTICS SYSTEM
Doris Grosse, Australian National University (ANU), Australia

IAC-18.A6.6.4
TESER – TECHNOLOGY FOR SELF-REMOVAL – STATUS OF A HORIZON 2020 PROJECT TO ENSURE THE POST-MISSION-DISPOSAL OF ANY FUTURE SPACECRAFT
Philipp Voigt, Airbus DS GmbH, Germany

IAC-18.A6.6.5
PERFORMANCE OF ELECTRODYNAMIC TETHER SYSTEM FOR DEBRIS DEORBITING: RE-EVALUATION BASED ON THE RESULTS OF KITE EXPERIMENTS
Satomi Kawamoto, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.A6.6.6
VISUAL SERVOING FOR DEORBITATION AND SERVICING OF A NON-COOPERATIVE TARGET IN SPACE: A TOP-DOWN APPROACH WITH A SINGLE IMAGING SENSOR COUPLED WITH A FPGA/DSP HARDWARE PLATFORM
Konrad Bojar, KB-Innotech Konrad Bojar, Poland

IAC-18.A6.6.8
TETHERED ACTIVE DEBRIS REMOVAL EXPERIMENTAL EVALUATION OF TETHER MODELLING APPROACHES
Marcel Becker, TU Braunschweig, Germany

IAC-18.A6.6.9
ON COMPLIANCE CONTACT CONTROL FOR MULTI-ARM ROBOTIC CAPTURING OF LARGE TUMBLING SPACE DEBRIS
Jiayu Liu, Beijing Research Institute of Precision Mechatronics and controls, China

IAC-18.A6.6.10
CAPTURING AND DEORBITING ENVISAT WITH AN AIRBUS SPACETUG. RESULTS FROM THE ESA E.DEORBIT CONSOLIDATION PHASE STUDY.
Stéphane Estable, Airbus Defence & Space, Space Systems, Germany

A6.7. Operations in Space Debris Environment, Situational Awareness

October 5 2018, 09:45 — ZARM 1

Co-Chair(s): *Carsten Wiedemann , TU Braunschweig, Institute of Space Systems, Germany; T.S. Kelso , Center for Space Standards and Innovation (CSSI), United States;*
Rapporteur(s): *Juan Carlos Dolado Perez , Centre National d'Etudes Spatiales (CNES), France;*

IAC-18.A6.7.1
GROUND-BASED LASER FOR TRACKING AND REMEDIATION – AN ARCHITECTURAL VIEW
Holger Krag, European Space Agency (ESA), Germany

IAC-18.A6.7.2
EMERGENCY COMMAND PATH FOR SPACE TRAFFIC MANAGEMENT
Dan Bast, ESA - European Space Agency, United Kingdom

IAC-18.A6.7.3
COMPARISON OF EFFECTIVE MACHINE LEARNING ALGORITHMS ON IMPROVING ORBIT PREDICTION ACCURACY OF LOW EARTH OBJECTS
Hao Peng, Rutgers, The State University of New Jersey, United States

IAC-18.A6.7.4
EVALUATION OF A COMMERCIAL RADAR NETWORK TO SUPPORT CONJUNCTION ASSESSMENT
Oscar Rodriguez Fernandez, Airbus Defence and Space, Germany

IAC-18.A6.7.5
THE RECENT DEVELOPMENTS OF THE KIAM SPACE DEBRIS DATABASE FOR SPACE SITUATION AWARENESS AND CONJUNCTION ANALYSIS
Viktor Voropaev, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-18.A6.7.6
TRACKING REQUIREMENTS FOR SPACE TRAFFIC MANAGEMENT IN THE PRESENCE OF PROPOSED LARGE LEO CONSTELLATIONS
Glenn Peterson, The Aerospace Corporation, United States

IAC-18.A6.7.7
MONITORING THE FINAL ORBITAL DECAY AND THE RE-ENTRY OF TIANGONG-1 WITH THE ITALIAN SST GROUND SENSOR NETWORK
Elena Vellutini, Italian Space Agency (ASI), Italy

IAC-18.A6.7.8
THE NEED FOR COMPARATIVE SSA
T.S. Kelso, Center for Space Standards and Innovation (CSSI), United States

IAC-18.A6.7.9
LEVERAGING WEB DATA AND GRAPH STRUCTURES TO SUPPORT RAPID SPACE OBJECT IDENTIFICATION
Samantha Le May, RMIT University (Royal Melbourne Institute of Technology), Australia

A6.8. Policy, Legal, Institutional and Economic Aspects of Space Debris Detection, Mitigation and Removal (Joint Session with IAF Space Security Committee)

October 5 2018, 13:30 — ZARM 1

Co-Chair(s): *Alexander Soucek , European Space Agency (ESA/ESRIN), Italy; David B. Spencer , The Pennsylvania State University, United States; Samantha Le May , RMIT University (Royal Melbourne Institute of Technology), Australia; Serge Plattard , University College London (UCL), United Kingdom;*

IAC-18.A6.8.1
SPACE DEBRIS REMOVAL, THE FRAGMENTATION OF INTERNATIONAL LAW AND CONVERGING UN MANDATES: WHY COMMERCIAL ACTORS SHOULD PAY ATTENTION TO DEVELOPMENTS IN THE UN
Charles Stotler, University of Mississippi School of Law, United States

IAC-18.A6.8.2
SPACE SITUATIONAL AWARENESS ON A GLOBAL SCALE: PERTINENT LEGAL ISSUES
Catherine Doldirina, International Institute of Space Law (IISL), Italy

IAC-18.A6.8.3
EMPLOYING LEX LATA AND LEX FERENDA FOR REGULATING THE SURGE IN SMALL SATELLITES
Kiran Nair, Institute of Air and Space Law, McGill University, Canada

IAC-18.A6.8.4
DEVELOPING ASAT TEST NORMS : ONE SMALL STEP TOWARDS REDUCING GLOBAL TENSIONS
Daniel Porras, United Nations, Switzerland

IAC-18.A6.8.5
AN ANALYSIS OF THE PUBLIC AND PRIVATE DIMENSION IN THE FIELD OF ACTIVE DEBRIS REMOVAL
Giulia Pavesi, University of Milan, Italy

IAC-18.A6.8.6
PERSPECTIVES FROM A VENTURE SPACE COMPANY ON REGULATORY FRAMEWORKS FOR ADDRESSING SPACE DEBRIS
Chris Blackerby, ASTROSCALE JAPAN Inc., Japan

IAC-18.A6.8.7
DUAL USE TECHNOLOGY IN SPACE: HOW MIGHT WE REMOVE SPACE DEBRIS WITHOUT CAUSING A WAR?
Stephen Coleman, UNSW Australia, Australia

IAC-18.A6.8.9
THE LEGAL IMPLEMENTATION OF SPACE DEBRIS REMEDIATION AS A NECESSARY CONDITION FOR THE SUSTAINABILITY OF NEAR-EARTH SPACE
Rada Popova, Institute of Air and Space Law, University of Cologne, Germany

IAC-18.A6.8.10
TREATING SPACE JUNK AS A SPACE RESOURCE
George Anthony Long, , United States

IAC-18.A6.8.11
THE SUSTAINABLE USE OF THE ORBIT RESOURCE: PROTECTED REGIONS AND ZONING OF EARTH ORBITS FROM THE PERSPECTIVE OF PUBLIC INTERNATIONAL LAW
Kathrin Jirik, University of Cologne, Germany

IAC-18.A6.8.12
LEGAL SOLUTIONS BASED ON FRENCH LEGISLATION AND OTHERS REGARDING ACTIVE DEBRIS REMOVAL ISSUES PHILIPPE CLERC
Philippe Clerc, Centre National d'Etudes Spatiales (CNES), France

A6.9. Orbit Determination and Propagation

October 3 2018, 14:45 — ZARM 1

Co-Chair(s): *Annamaria Nassisi , Thales Alenia Space Italia, Italy; Seishiro Kibe , Japan Aerospace Exploration Agency (JAXA), Japan;*
Rapporteur(s): *Heiner Klinkrad , European Space Agency (ESA), Germany;*

IAC-18.A6.9.1
IMPROVING THE ACCURACY OF ATMOSPHERIC MODELLING AND THE EFFECT ON PRECISE ORBIT PROPAGATION
Emma Kerr, Space Environment Research Centre Ltd. (SERC); School of Science, RMIT University, Australia

IAC-18.A6.9.2
IMPACT OF VARIATIONS IN THERMOSPHERIC MASS DENSITY ON THE ORBIT PROPAGATION OF LOW EARTH ORBIT SATELLITES
Changyong HE, RMIT University (Royal Melbourne Institute of Technology), Australia

IAC-18.A6.9.3
TOWARDS THE MAINTENANCE OF GAUSSIANITY ON STATE VECTOR UNCERTAINTY PROPAGATION
Sophie Laurens, Centre National d'Etudes Spatiales (CNES), France

IAC-18.A6.9.4
FILTERING UNDER AMBIGUITY FOR THE DEBRIS-TRACKING PROBLEM
Shambo Bhattacharjee, University of Leeds, United Kingdom

IAC-18.A6.9.5
VALIDATION OF A NOVEL COUPLED ORBIT-ATTITUDE PROPAGATOR BY COMPARISON TO SLR DATA AND LIGHT CURVES
Luc Sagnieres, McGill University, Canada

IAC-18.A6.9.6
RECONSTRUCTION OF NON-COOPERATIVE SPACECRAFT MANEUVERS DURING OBSERVATION GAPS FROM ANGLES-ONLY MEASUREMENTS USING MACHINE LEARNING
Jason Reiter, The Pennsylvania State University, United States

IAC-18.A6.9.7 (non-confirmed)
USING CONJUNCTION ANALYSIS METHODS FOR MANOEUVRE DETECTION - APPLICATION TO OPTICAL OBSERVATIONS
Johannes Herzog, Deutsches Zentrum fuer Luft- und Raumfahrt (DLR), Germany

IAC-18.A6.9.8
IMPROVING ACCURACY OF LEO OBJECTS TWO-LINE ELEMENTS THROUGH OPTICAL MEASUREMENTS
Marco Acernese, Sapienza University of Rome, Italy

IAC-18.A6.9.9
OBJECT DETECTION METHODS FOR RADAR SURVEY MEASUREMENTS
Alejandro Pastor-Rodríguez, GMV Aerospace & Defence SAU, Spain

IAC-18.A6.9.10
COMPARISON OF NEW METHODS FOR THE CORRELATION OF SHORT RADAR TRACKLETS
Benedikt Reihs, Astronomical Institute University of Bern (AIUB), Switzerland

A6.10-C1.7. Orbital Safety and Optimal Operations in an Increasingly Congested Environment (Joint Astrodynamics/Space Debris Session)

October 4 2018, 14:45 — CCB Borgward

Co-Chair(s): *Daniel Scheeres , Colorado Center for Astrodynamics Research, University of Colorado, United States; Yukihito Kitazawa , JAXA, Japan;*
Rapporteur(s): *Anilkumar A K , Vikram Sarabhai Space Centre (VSSC), India; Moriba Jah , The University of Texas at Austin, United States;*

IAC-18.A6.10-C1.7.1
GOES 8 TUMBLING SPIN STATE EVOLUTION AND THE IMPLICATIONS FOR GEO DEBRIS MITIGATION
Conor Benson, Colorado Center for Astrodynamics Research, University of Colorado, United States

IAC-18.A6.10-C1.7.2
UNCERTAINTY AND DATA OBSERVABILITY ANALYSIS FOR RSO MASS/ALBEDO-AREA ESTIMATION
Vishnuu Mallik, The University of Texas at Austin, United States

IAC-18.A6.10-C1.7.3
LONG-TERM DYNAMICAL EVOLUTION ANALYSIS AND LUNI-SOLAR RESONANCES FOR INCLINED GEOSTATIONARY TRANSFER ORBITS
Yue Wang, Beihang University, China

IAC-18.A6.10-C1.7.4
AUTOMATED NEAR REAL-TIME VALIDATION AND EXPLOITATION OF OPTICAL SENSOR DATA FOR IMPROVED ORBITAL SAFETY
Thomas Kelecy, Applied Defense Solutions, Inc., United States

IAC-18.A6.10-C1.7.5
USING REACHABILITY TO COMPUTE UNSAFE REGIONS IN STATE SPACE THROUGH SAMPLING METHODS
Julian Brew, Georgia Institute of Technology, United States

IAC-18.A6.10-C1.7.6
RAPID MODELING OF ELECTROSTATIC FORCES AND TORQUES CONSIDERING DIELECTRICS
Joseph Hughes, University of Colorado Boulder, United States

IAC-18.A6.10-C1.7.7
DEBRIS COLLISION AVOIDANCE BY MEANS OF ATTITUDE CONTROL - IN FLIGHT DEMONSTRATION WITH TET-1
Maren Huelsmann, DLR (German Aerospace Center), Germany

IAC-18.A6.10-C1.7.8
EVOLUTION OF FRAGMENTATION CLOUD IN HIGHLY ECCENTRIC EARTH ORBITS THROUGH CONTINUUM MODELLING
Stefan Frey, Politecnico di Milano, Italy

IAC-18.A6.10-C1.7.9
LEDSAT: A LED-BASED LEO DEMONSTRATOR FOR SPACE DEBRIS ORBIT AND ATTITUDE DETERMINATION
Paolo Marzioli, Sapienza University of Rome, Italy

IAC-18.A6.10-C1.7.10
THE CONCEPT OF THE FUNCTIONING OF A SPACE VEHICLE - A SPACE DEBRIS COLLECTOR WITH A VIEW TO REMOVING OBJECTS OF SPACE DEBRIS INTO ORBIT OF A BURIAL
Vsevolod Koryanov, Bauman Moscow State Technical University, Russian Federation

IAC-18.A6.10-C1.7.11
DYNAMICAL SYSTEM DESCRIPTION OF THE SOLAR RADIATION PRESSURE AND J2 PHASE SPACE FOR END-OF-LIFE DESIGN AND FROZEN ORBIT DESIGN
Elisa Maria Alessi, IFAC-CNR, Italy

IAC-18.A6.10-C1.7.12
LOW THRUST MANOEUVRE DETECTION FOR LOW EARTH ORBIT SPACE OBJECTS
Steve Gehly, University of New South Wales, Australia

A7. IAF SYMPOSIUM ON FUTURE SPACE ASTRONOMY AND SOLAR-SYSTEM SCIENCE MISSIONS

Coordinator(s): *Brent Sherwood , Caltech/JPL, United States; Jakob van Zyl , National Aeronautics and Space Administration (NASA), United States;*

A7.1. Space Agency Strategies and Plans

October 1 2018, 15:00 — CCB Roselius

Co-Chair(s): *Jakob van Zyl , National Aeronautics and Space Administration (NASA), United States; Pietro Ubertini , INAF, Italy;*
Rapporteur(s): *Brent Sherwood , Caltech/JPL, United States;*

IAC-18.A7.1.1
THE ATHENA X-RAY TELESCOPE AND ITS TECHNICAL CHALLENGES
Eric Wille, ESA, The Netherlands

IAC-18.A7.1.2
PLATO: A SATELLITE DESIGNED TO FIND THE SECOND EARTH.
Antonio Garcia, OHB System AG, Germany

IAC-18.A7.1.3
SCIENCE PRIORITIZATION AT THE U.S. NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE
Colleen Hartman, National Academies of Sciences, Engineering, and Medicine, United States

IAC-18.A7.1.4
NASA'S STRATEGIC ASTROPHYSICS TECHNOLOGY PROGRAM: ACCOMPLISHMENTS IN THE PAST DECADE AND FUTURE TECHNOLOGY NEEDS
Azita Valinia, NASA Goddard Space Flight Center Greenbelt MD 20771, United States

IAC-18.A7.1.5
ATMOSPHERIC ANALYSIS OF THE UNITED ARAB EMIRATES FOR RADIO-ASTRONOMY ACTIVITIES
Muthanna AlMahmoud, UAE Space Agency, United Arab Emirates

IAC-18.A7.1.6
RECOMMENDATIONS FOR APPROACHES TO LIFE DETECTION FOR FUTURE MISSION DEVELOPMENT
Monica Ebert, SGT Inc. / NASA Ames Research Center, United States

IAC-18.A7.1.7
INTERSTELLAR PROBES: THE BENEFITS TO ASTRONOMY AND ASTROPHYSICS
Kelvin Long, Initiative for Interstellar Studies, United Kingdom

IAC-18.A7.1.8
LONG DURATION GENESIS-TYPE MISSIONS TO EXOSOLAR PLANETS
Claudius Gros, University of Frankfurt am Main, Germany

A7.2. Science Goals and Drivers for Future Exoplanet, Space Astronomy, Physics, and Outer Solar System Science Missions

October 3 2018, 09:45 — CCB Roselius

Co-Chair(s): *Brent Sherwood , Caltech/JPL, United States; Pietro Ubertini , INAF, Italy;*
Rapporteur(s): Eric Wille , ESA, The Netherlands;

IAC-18.A7.2.1
A MISSION TO SUN-EARTH TRIANGULAR LIBRATION POINT FOR WEATHER FORECAST
Ying WANG, Chinese Society of Astronautics (CSA), China

IAC-18.A7.2.2
INVESTIGATION ON THE SIGNIFICANT SOLAR TERRESTRIAL PARAMETERS AFFECTING IONOSPHERIC SQ CURRENT SYSTEM
Mohamad Huzaimy Jusoh, Universiti Teknologi MARA (UITM), Malaysia

IAC-18.A7.2.5
EXPLORING THE KUIPER BELT WITH SUN-DIVING SOLAR SAILS
Elena Ancona, Telespazio VEGA Deutschland GmbH, Germany

IAC-18.A7.2.6
MAGRATHEA: A PROPOSAL FOR A SATELLITE MISSION ON PROTOPLANETARY DUST GROWTH EXPERIMENTS
Marine Martin-Lagarde, Commissariat à l'énergie atomique et aux énergies alternatives (CEA), France

IAC-18.A7.2.7
EFFECTS OF PLANETARY ALBEDO AND GREENHOUSE GASES ON THE HABITABLE ZONE – SEEKING FOR HABITABLE PLANETS
Harald Hellmann, German Aerospace Center (DLR), Bremen, Germany

IAC-18.A7.2.8
RADIO INTERFEROMETERS LARGER THAN EARTH: LESSONS LEARNED AND FORWARD LOOK OF SPACE VLBI
Leonid Gurvits, , The Netherlands

IAC-18.A7.2.9
DARK MATTER IN DWARF SPHEROIDAL GALAXIES
Sabrina Alam, International Space University (ISU), France

IAC-18.A7.2.10
LAGRANGE: A PROPOSAL FOR FUNDAMENTAL PHYSICS IN SPACE
Angelo Tartaglia, Politecnico di Torino, Italy

A7.3. TTechnology Needs for Future Missions, Systems, and Instruments

October 4 2018, 14:45 — CCB Roselius

Co-Chair(s): *Eric Wille , ESA, The Netherlands; Jakob van Zyl , National Aeronautics and Space Administration (NASA), United States;*
Rapporteur(s): *Brent Sherwood , Caltech/JPL, United States;*

IAC-18.A7.3.1
SOLAR WIND ANALYZER - THE SOLAR ORBITER MILESTONE TOWARDS ON-BOARD INTELLIGENT DECISION MAKING SYSTEMS
Leonardo Amoruso, Planetek Italia, Italy

IAC-18.A7.3.2
PROBA3 FORMATION FLYING SYSTEM, A KEY TECHNOLOGY FOR FUTURE FORMATION FLYING SCIENCE MISSIONS: CURRENT STATUS AND SIMULATION RESULTS
Luigi Strippoli, GMV Aerospace & Defence SAU, Spain

IAC-18.A7.3.3
STATUS AND GROUND CALIBRATION RESULTS OF THE PLANETARY ION CAMERA (PICAM) FOR BEPICOLOMBO AND THE JOVIAN ELECTRON AND ION SPECTROMETER (JEI) FOR THE JUPITER ICY MOONS (JUICE) MISSION.
Patrick Bambach, Max-Planck Institute for Solar Systems Research,, Germany

IAC-18.A7.3.4
A TECHNOLOGY ARCHITECTURE FOR ACCESSING THE OCEANS OF ICY WORLDS
Tom Cwik, NASA JPL, United States

IAC-18.A7.3.5
PLATO SATELLITE POINTING PERFORMANCE – PAVING THE WAY FOR CHARACTERISATION OF EARTH-LIKE EXTRASOLAR PLANETS
Anneke Monsky, OHB System AG-Bremen, Germany

IAC-18.A7.3.6
SUB-PIXEL DETECTOR CHARACTERIZATION FOR HIGH PRECISION PHOTOMETRY MISSIONS
Akshata Krishnamurthy, Massachusetts Institute of Technology (MIT), United States

IAC-18.A7.3.7
STRATOSPHERIC BALLOONS AS A PLATFORM FOR THE NEXT LARGE FAR INFRARED OBSERVATORY
Philipp Maier, Institute of Space Systems, University of Stuttgart, Germany

IAC-18.A7.3.8
SECOND-GENERATION MICRO-SPEC: A COMPACT SPECTROMETER FOR FAR-INFRARED AND SUBMILLIMETER SPACE MISSIONS
Giuseppe Cataldo, National Aeronautics and Space Administration (NASA), Goddard Space Flight Center, United States

IAC-18.A7.3.9
FORMATION FLYING TECHNIQUES FOR THE VIRTUAL TELESCOPE FOR X-RAY OBSERVATIONS
Kyle Rankin, New Mexico State University, United States

IAC-18.A7.3.10
DEVELOPMENT OF A GAMMA RAY SCATTERING POLARIMETRY DETECTOR FOR CUBESATS
Jared Fuchs, University of Alabama in Huntsville, United States

IAC-18.A7.3.11
HIGH PRECISE MASS CENTER ESTIMATION FOR GRAVITATIONAL WAVE DETECTION
Teng Zhang, College of Astronautics, Northwestern Polytechnical University (NPU), China

IAC-18.A7.3.12
QUANTUM-ASSISTED INTERFEROMETRY IN SPACE: REAL-TIME COHERENCE IN SPACE TELESCOPE ARRAYS WITH SHARED QUANTUM STATES
Pierfrancesco La Mura, HHL Leipzig Graduate School of Management, Germany

B1. IAF EARTH OBSERVATION SYMPOSIUM

Coordinator(s): *Andrew Court , TNO, The Netherlands; Gunter Schreier , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany*

B1.1. International Cooperation in Earth Observation Missions

October 1 2018, 15:00 — ZARM 3

Co-Chair(s): *John Hussey , Consultant, United States; Mukund Kadursrinivas Rao , National Institute of Advanced Studies (NIAS), India;*
Rapporteur(s): *Brent Smith , National Oceanic and Atmospheric Administration (NOAA), United States;*

IAC-18.B1.1.1
KEYNOTE: 2018 ACTIVITIES OF THE INTERNATIONAL COMMITTEE ON EARTH OBSERVATION SATELLITES (CEOS)
Astrid-Christina Koch, European Commission, Belgium

IAC-18.B1.1.2
FROM INTERNATIONAL SPACE STATION TO INTERNATIONAL CONSTELLATIONS: A NEW PARADIGM FOR COOPERATION FOR EARTH OBSERVATION?
Veronica Foreman, Massachusetts Institute of Technology (MIT), United States

IAC-18.B1.1.3
FROM GLOBAL TO NATIONAL: IMPACT OF INTERNATIONAL COOPERATION ON NATIONAL EARTH OBSERVATION POLICY
Ikuko KURIYAMA, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.B1.1.4
VENUS: FIRST IMAGES AND FIRST ELECTRIC PROPULSION EXPERIMENT RESULTS FOR THIS FRENCH-ISRAELI MISSION.
Pierric Ferrier, Centre National d'Etudes Spatiales (CNES), France

IAC-18.B1.1.6
SCALABLE CUBESAT EARTH OBSERVATION PAYLOADS,\\ BORN FROM INTERNATIONAL COLLABORATION
Francois Malan, Space Advisory Company, South Africa

IAC-18.B1.1.8
INTERNATIONAL COOPERATION FOR CHINA SMALL SATELLITE
Yufu Cui, DFH Satellite Co., Ltd., China Academy of Space Technology (CAST), China

IAC-18.B1.1.9
DYNAMIC AND CONTROL OF THE INTERFERENCE LOCATIONS BETWEEN 2 SAR CONSTELLATIONS
Itziar Barat, ESA - European Space Agency, The Netherlands

IAC-18.B1.1.11
COSMO-SKYMED AND THE ASI-CONAE COOPERATION: THE SIASGE PROGRAMME
Maria Libera Battagliere, ASI - Italian Space Agency, Italy

IAC-18.B1.1.12
PERUSAT1 EARTH OBSERVATION SYSTEMS : 2 YEARS OF SUCCESS IN ORBIT AND PRELIMINARY LESSONS
Carlos CABALLERO, Agencia Espacial del Peru (CONIDA), Peru

IAC-18.B1.1.13 (non-confirmed)
AN ATMOSPHERIC SENSOR PAYLOAD FOR THE INDONESIAN RX-320 SOUNDING ROCKET
Sebastian Trowitzsch, Technische Universität Berlin, Germany

B1.2. Future Earth Observation Systems

October 2 2018, 09:45 — ZARM 3

Co-Chair(s): *Alain Gleyzes , CNES, France; Timo Stuffler , OHB System AG - Munich, Germany;*
Rapporteur(s): *Gunter Schreier , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*

IAC-18.B1.2.1
CURRENT SITUATION AND PROPOSALS OF FUTURE EARTH OBSERVATION MISSIONS IN CHINA
Ba Jin, Technology and Engineering Center for Space Utilization, Chinese Academy of Sciences, China

IAC-18.B1.2.2
EUMETSAT'S FUTURE LOW EARTH ORBIT SATELLITE PROGRAMMES PROVIDE CONTINUITY OF OBSERVATIONS AND DATA SERVICES
Marc Cohen, Eumetsat, Germany

IAC-18.B1.2.4
TANDEM-X & TANDEM-L: SETTING BENCHMARKS IN RADAR REMOTE SENSING
Alberto Moreira, German Aerospace Center (DLR), Germany

IAC-18.B1.2.5
INTRODUCTION TO EUMETSAT'S FUTURE GEOSTATIONARY METEOSAT THIRD GENERATION (MTG) PROGRAMME
Alexander Schmid, Eumetsat, Germany

IAC-18.B1.2.6
A CONSTELLATION OF SMALL SATELLITES FOR THE MONITORING OF GREENHOUSE GASES
Laure Brooker Lizon-Tati, Airbus Defence and Space, France

IAC-18.B1.2.7
TOWARDS AN EUROPEAN CO2 MONITORING MISSION
Heinrich Bovensmann, University of Bremen, Germany

IAC-18.B1.2.8
ENMAP, THE HYPERSPECTRAL EARTH OBSERVATION SATELLITE: OVERVIEW AND CURRENT STATUS
Martin Mücke, OHB System AG - Munich, Germany

IAC-18.B1.2.9
CONSTELLATIONS PROPOSALS FOR REMOTE SENSING WITH UAV –INTERLEAVED WITH CUBESAT/SMALLSAT NETWORKS
Kishore Pasi, ISRO Satellite Centre (ISAC), India

IAC-18.B1.2.10
ASSESSING USER NEEDS TO INFORM FUTURE LAND IMAGING SYSTEMS
Peter Doucette, U.S. Geological Survey, United States

IAC-18.B1.2.11
DIEGO – DYNAMIC INFRARED EARTH OBSERVATION ON THE ISS ORBIT
Andreas Rienow, Ruhr-University Bochum, Germany

IAC-18.B1.2.12
G-CLASS: A GEOSYNCHRONOUS RADAR MISSION TO STUDY THE DIURNAL WATER CYCLE
Stephen Hobbs, Cranfield University, United Kingdom

IAC-18.B1.2.13
"COSMO-SKYMED DI SECONDA GENERAZIONE" - CIVILIAN PRODUCT SPECIFICATIONS
Rino Lorusso, Italian Space Agency (ASI), Italy

B1.3. Earth Observation Sensors and Technology

October 2 2018, 14:45 — ZARM 3

Co-Chair(s): *Andrew Court , TNO, The Netherlands; Roland LeGoff , SODERN, France;*
Rapporteur(s): *Marc Cohen , Eumetsat, Germany;*

IAC-18.B1.3.1
TROPOMI ONE YEAR IN-ORBIT: EXCELLENT TEAM WORK, EXCELLENT RESULTS.
Jan Doornink, Airbus Defence and Space Netherlands B.V., The Netherlands

IAC-18.B1.3.2
POSTLAUNCH VERIFICATION RESULTS OF GCOM-C SPACECRAFT BUS AND SGLI RADIOMETER
Shigemasa Ando, JAXA, Japan

IAC-18.B1.3.3
THE NEW DEVELOPMENT OF HIGH RESOLUTION OPTICAL REMOTE SENSOR IN CHINA
Chen Xiaoli, Beijing Institute of Space Mechanics & Electricity, China Academy of Space Technology (CAST), China

IAC-18.B1.3.4
CHALLENGES AND SOLUTIONS OF FREE-FORM OPTICS DESIGN FOR HIGHLY PERFORMANT EARTH OBSERVATION INSTRUMENTS IN SPACE
Michael Deiml, OHB System AG, Germany

IAC-18.B1.3.5
A NOVEL COMPACT NO2 INSTRUMENT FOR HIGH-RESOLUTION AIR QUALITY REMOTE SENSING
Martin Siegl, TNO Space, The Netherlands

IAC-18.B1.3.6
PROTOTYPE DESIGN OF A RADIOMETRICALLY CALIBRATED MINIATURE MULTISPECTRAL EARTH OBSERVATION IMAGER FOR NANOSATELLITES
Joosep Kivastik, University of Tartu, Estonia

IAC-18.B1.3.7
PROBING PLANETARY ATMOSPHERES WITH POLARIZED INELASTIC SCATTERING SENSED BY SPACEBORNE PLATFORMS
Luca Lelli, University of Bremen, Germany

IAC-18.B1.3.8 (non-confirmed)
HIGH DATA RATE CONNECTIVITY BY LASER COMMUNICATION - KEY ENABLER FOR FUTURE EO MISSIONS
Matthias Motzigemba, Tesat-Spacecom GmbH & Co. KG, Germany

IAC-18.B1.3.9
DUAL FREQUENCY SYNCHRONIZED L&S BAND AIRBORNE SAR SYSTEM
Rakesh Kumar Bhan, Indian Space Research Organization (ISRO), India

IAC-18.B1.3.10
PASSAT: PASSIVE BI-STATIC RADAR IMAGING CONSTELLATION – AIRBORNE TRIALS AND IN-ORBIT DEMONSTRATOR DESIGN
Craig Underwood, Surrey Space Centre, University of Surrey, United Kingdom

IAC-18.B1.3.11
PACKMAN - PORTABLE INSTRUMENT TO STUDY SPACE WEATHER
Thasshwin Mathanlal, Luleå University of Technology, Sweden

B1.4. Earth Observation Data Management Systems

October 5 2018, 09:45 — ZARM 3

Co-Chair(s): *Gunter Schreier , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; James E. Graf , National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States;*
Rapporteur(s): *Cristian Bank , Eumetsat, Germany;*

IAC-18.B1.4.2
THE GERMAN COPERNICUS DATA AND EXPLOITATION PLATFORM "CODE-DE" – ONLINE DATA ACCESS AND BIG DATA PROCESSING
Vanessa Keuck, DLR, German Aerospace Center, Germany

IAC-18.B1.4.3
WHAT HAPPENS WHEN OPEN DATA GETS BIG? OPPORTUNITIES AND RISKS FOR EARTH OBSERVATION
Mariel Borowitz, Georgia Institute of Technology, United States

IAC-18.B1.4.4
BIGDATACUBE: MAKING BIG DATA A COMMODITY
Peter Baumann, Jacobs University Bremen, Germany

IAC-18.B1.4.5
AN OUTLOOK ON LANDSAT DATA MANAGEMENT STRATEGY
Peter Doucette, U.S. Geological Survey, United States

IAC-18.B1.4.6
ON-ORBIT DATA MINING TECHNOLOGY FOR EARTH OBSERVATION IMAGE PROCESSING
Mengxi Yu, Technology and Engineering Center for Space Utilization,Chinese Academy of Sciences, China

IAC-18.B1.4.7
THE SENTINEL-3 PAYLOAD DATA GROUND SEGMENT ELEMENTS -- DESIGNED FOR SCALABILITY AND ADAPTABILITY
Bernard Pruin, Werum Software & Systems AG, Germany

IAC-18.B1.4.9
A CLOUD-BASED PLATFORM FOR GEO-ANALYTICS PRODUCTION FROM BIG SATELLITE DATA: RHETICUS®
Daniela Drimaco, Planetek Italia, Italy

IAC-18.B1.4.10
HIGH PERFORMANCE SUPERCOMPUTING VIRTUAL ENVIRONMENT FOR GEO-INFORMATION PROCESSING IN MEXICO
Enrique Pacheco Cabrera, Incomspace, Mexico

IAC-18.B1.4.12
NEAR REAL TIME PROCESSING FRAMEWORK FOR REMOTE SENSING BASED MARITIME SURVEILLANCE APPLICATIONS
Egbert Schwarz, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.B1.4.13
AUTOMATED CLOUD AND CLOUD SHADOW DETECTION, REMOVAL AND FILLING ON LANDSAT, MODIS AND SENTINEL DATA
Marco Schmidt, Bochum University of Applied Sciences, Germany

B1.5. Earth Observation Applications, Societal Challenges and Economic Benefits

October 4 2018, 09:45 — ZARM 3

Co-Chair(s): *Luigi Bussolino , Bussolino and Associates, Italy; Paul Kamoun , Thales Alenia Space France, France; Rapporteur(s): Wolfgang Rathgeber , European Space Agency (ESA), Italy;*

IAC-18.B1.5.1
Air Quality services using TROPOMI and beyond and the LOTOS-EUROS CTM
Johan de Vries, Airbus DS, The Netherlands

IAC-18.B1.5.2
CONTRIBUTION OF SPACE-BASED INFORMATION FOR LOW-EMISSION AND RESILIENT SOCIETIES: ROLE OF UN-SPIDER
Shirish Ravan, United Nations, Austria

IAC-18.B1.5.3
BATHYMETRY AND TIDAL FLAT TOPOGRAPHY FROM SENTINEL-1 ACQUISITIONS
Stefan Wiehle, German Aerospace Center (DLR), Germany

IAC-18.B1.5.4
NAVIGATION ASSISTANCE IN POLAR WATERS THROUGH INFORMATION ON SEA ICE DRIFT AND COVERAGE DERIVED FROM SPACEBORNE SYNTHETIC APERTURE RADAR IMAGES
Anja Frost, DLR (German Aerospace Center), Germany

IAC-18.B1.5.5
REMOTE SENSING APPLICATIONS FOR RED TIDE MONITORING USED AS FEEDBACK FOR IMPROVING NANO-SATELLITE CONCEPTUAL DESIGN, THE CASE OF RETI-SAT AT THE UNIVERSITY OF COSTA RICA.
Maria Molina, University of Costa Rica, Costa Rica

IAC-18.B1.5.6
SPACE-BASED WATERBORNE DISEASE SURVEILLANCE IN COASTAL COMMUNITIES: ACTIONABLE RISK ASSESSMENT OF ENTERIC PATHOGENS IN A CHANGING CLIMATE
Samuel Malloy, The Ohio State University, United States

IAC-18.B1.5.7
MAXIMIMIZING FOREST VALUE THROUGH USING SENTINEL-2 IN COMBINATION WITH HYPERSPECTRAL UAVS
Christina Aas, Science [&] Technology AS, Norway

IAC-18.B1.5.8
MONITORING BURNED AREAS IN THE AMAZON FOREST FROM TIME SERIES SATELLITE DATA
Giancarlo Santilli, University of Brasilia, Brazil

IAC-18.B1.5.9
CARBON ACCOUNTING INCORPORATING AGRICULTURE TO URBAN LAND USE CHANGE BY FUSING MULTI-RESOLUTION OPTICAL AND SAR DATA IN THE OPEN DATA CUBE OVER THE 16 CENSUS METROPOLITAN AREAS OF CANADA
Wolfgang Lueck, PCI Geomatics, Canada

IAC-18.B1.5.10
POTENTIAL APPLICATIONS FOR THE HYPERSPECTRAL IMAGER DESIS
Kai Perlmutter, The Ohio State University, United States

IAC-18.B1.5.12 (non-confirmed)
THE ITALIAN PROJECT SARDOS: A STRATEGY OF TERRITORIAL CONTROL FOR THE LEGALITY
Michele Boella, , Italy

B1.6-GTS.1. Citizen Science in Global Earth Observation Systems

October 4 2018, 14:45 — ÖVB 4

Co-Chair(s): *Harry A. Cikanek , National Oceanic and Atmospheric Administration (NOAA), United States; Jessica Culler , The Planetary Society, United States;*
Rapporteur(s): *Brent Smith , National Oceanic and Atmospheric Administration (NOAA), United States; Kate Becker , NOAA/NESDIS, United States;*

IAC-18.B1.6-GTS.1.1
THE ROLE OF POLICY IN USING CITIZEN SCIENCE FOR EARTH OBSERVATION
Krystal Wilson, Secure World Foundation, United States

IAC-18.B1.6-GTS.1.2
DESIGN FOR A CITIZEN SCIENCE AND PUBLIC ENGAGEMENT PROJECT CELEBRATING ANTARCTICA AND THE SOUTHERN OCEAN
Danielle Wood, Massachusetts Institute of Technology (MIT), United States

IAC-18.B1.6-GTS.1.3
COOPERATIVE OPEN ONLINE LANDSLIDE REPOSITORY (COOLR) TO ENHANCE DISASTER RESEARCH AND PREDICTION
Caroline Juang, Earth Science Division, NASA Goddard Space Flight Center, and Science Systems and Applications Inc., United States

IAC-18.B1.6-GTS.1.4
FARMSENSE: PROVIDING AGRICULTURAL INSIGHTS USING REMOTELY SENSED DATA AND OPENSTREETMAP DATA.
Ayodele Adeyemo, Federal University of Technology Akure, Ondo state, Nigeria, Nigeria

IAC-18.B1.6-GTS.1.5
ICEKING: A PLATFORM COMBINING SUSTAINABLE TOURISM AND CITIZEN SCIENCE ON GLACIERS
Paola Belingheri, IceKing GMBH, Austria

IAC-18.B1.6-GTS.1.6
CROWDMAG: NON-TRADITIONAL OBSERVATION OF EARTH'S MAGNETIC FIELD
Manoj C. Nair, NOAA's National Centers for Environmental Information (NCEI), United State

B2. IAF SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM

Coordinator(s): *Manfred Wittig , European Space Agency (ESA), retired, The Netherlands; Otto Koudelka , Graz University of Technology (TU Graz), Austria;*

B2.1. Advanced Space Communications and Navigation Systems

October 1 2018, 15:00 — ÖVB 3

Co-Chair(s): *Amane Miura , National Institute of Information and Communications Technology (NICT), Japan; Morio Toyoshima , National Institute of Information and Communications Technology (NICT), Japan;*
Rapporteur(s): *Giovanni B. Palmerini , Sapienza University of Rome, Italy;*

IAC-18.B2.1.1
SATCOM 2025 – THE NEAR FUTURE OF SATELLITE COMMUNICATIONS IN GERMANY
Carsten Borowy, OHB System AG-Bremen, Germany

IAC-18.B2.1.2
ELECTRA: HIGHLY VERSATILE AND EFFICIENT SMALL GEO PLATFORM
Marco De Tata, OHB System AG-Bremen, Germany

IAC-18.B2.1.4
THE HEINRICH HERTZ SATELLITE
Bent Ziegler, OHB System AG-Bremen, Germany

IAC-18.B2.1.5
KA-BAND HIGH-RATE DOWNLINK SYSTEM FOR THE NISAR MISSION
Michael Kobayashi, Jet Propulsion Laboratory - California Institute of Technology, United States

IAC-18.B2.1.6
IMPROVED THROUGHPUT SATELLITE SYSTEM USING EFFICIENT TRANSCEIVER ARCHITECTURE
Sara AlMaeeni, Mohammed Bin Rashid Space Centre (MBRSC), United Arab Emirates

IAC-18.B2.1.7
A TECHNICAL COMPARISON OF THREE LOW EARTH ORBIT SATELLITE CONSTELLATIONS SYSTEMS TO PROVIDE GLOBAL BROADBAND
Inigo del Portillo, Massachusetts Institute of Technology (MIT), United States

IAC-18.B2.1.9
STUDY ON ALTERNATIVES COMPARISON OF RELAY SATELLITE BASED ON LASER LINKS
Hongyan Xu, Institute of Telecommunication Satellite, China Academy of Space Technology (CAST), China

IAC-18.B2.1.10
CHALLENGES IN DESIGNING SATELLITE CONSTELLATION FOR PROVIDING UNINTERRUPTED NETWORK SECURITY THROUGH QUANTUM KEY DISTRIBUTION AT A LARGER GEOGRAPHIC REGION
Sanat Biswas, IIIT Delhi, India

IAC-18.B2.1.11
COMMUNICATION AND NAVIGATION ARCHITECTURE FOR PLANETARY EXPLORATION CARRIED-ON BY A SWARM OF MOBILE ROBOTS
Marco Carpentiero, Sapienza University of Rome, Italy

IAC-18.B2.1.12
THE GALILEO REFERENCE CENTRE AND ITS ROLE IN THE GALILEO SERVICE PROVISION
Peter Buist, European GNSS Agency (GSA), The Netherlands

B2.2. Fixed and Broadcast Communications

October 2 2018, 09:45 — ÖVB 3

Co-Chair(s): *Desaraju Venugopal , Devas Multimedia Pvt. Ltd., India; Robert D. Briskman , Sirius XM Radio, United States;*
Rapporteur(s): *Laszlo Bacsardi , Hungarian Astronautical Society (MANT), Hungary;*

IAC-18.B2.2.1
COMMUNICATION NETWORK IN LEO: IN-ORBIT VERIFICATION OF INTERSATELLITE LINK BY NANOSATELLITE CLUSTER S-NET
Walter Frese, Technische Universität Berlin, Germany

IAC-18.B2.2.2
SOFTWARE-DEFINED COMMUNICATION ON THE NANOSATELLITE MOVE-II
Sebastian Rückerl, Technical University of Munich, Germany

IAC-18.B2.2.3
MULTIPOINT INTER SATELLITE LINK AND RANGING PROTOCOL
Miguel Angel Fernandez, SYRLINKS, France

IAC-18.B2.2.4
SATELLITE COMMUNICATION MARKET IN INDIA : ASSESSING KEY TRENDS, MARKET DRIVERS, CHALLENGES AND GROWTH PROSPECTS
Sumit Kumar, Indian Space Research Organization (ISRO), India

IAC-18.B2.2.5
INTERFERENCE INTO RADIO BROADCAST SATELLITE UPLINKS
Riza Akturan, Sirius XM Radio, United States

IAC-18.B2.2.6
REGIONAL HTS SERVICES FROM LOW EARTH ORBIT
Sai Ram Sadhu, ISRO Satellite Centre (ISAC),ISRO, India

IAC-18.B2.2.7
CO-OPERATIVE RF RANGING AND TIME TRANSFER DEFINITIONS FOR MEGA CONSTELLATIONS AND SPACE TRAFFIC MANAGEMENT
Zakaria Bouhanna, Surrey Space Centre, University of Surrey, United Kingdom

IAC-18.B2.2.8
HIGHLY FLEXIBLE TELEMETRY, TRACKING AND COMMAND TRANSPONDER SYSTEMS FOR EARTH OBSERVATION AND TELECOMMUNICATION SATELLITE CONTROL
Philipp Wertz, Tesat-Spacecom GmbH & Co. KG, Germany

IAC-18.B2.2.9
STUDY OF TERABIT/S SATELLITE FOR INDIA
Bharath Kumar Reddy Pasala, ISRO Satellite Centre (ISAC),ISRO, India

IAC-18.B2.2.10
INTER-SATELLITE DATA RELAY SYSTEM (IDRS) FOR LEO SATELLITES USING A COMMERCIALLY AVAILABLE GEO SATELLITE SYSTEM
Khai Pang Tan, Addvalue Innovation Pte Ltd, Singapore, Republic of

IAC-18.B2.2.11
THE BUSINESS IMPACT THAT UHTS IN LEO COULD CAUSE TO HTS IN GEO: CASE ANALYSIS FOR BOLIVIA'S NEXT HTS TO BE IMPLEMENTED
Marco Alejandro Murillo Alcocer, Agencia Boliviana Espacial, Bolivia

IAC-18.B2.2.13
CHINA COMMUNICATION SATELLITES LAUNCHED IN 2017
Min Wang, China Academy of Space Technology (CAST), China

B2.3. Mobile Satellite Communications and Navigation Technology

October 3 2018, 09:45 — ÖVB 3

Co-Chair(s): *Giovanni B. Palmerini , Sapienza University of Rome, Italy; Joe M. Straus , The Aerospace Corporation, United States;*
Rapporteur(s): *Peter Buist , Netherlands Space Society (NVR), The Netherlands;*

IAC-18.B2.3.1
3GPP ACTIVITIES ON 5G SATELLITE INTEGRATION
Toon Norp, TNO, The Netherlands

IAC-18.B2.3.2
NAVIGATION AND COMMUNICATION NETWORK FOR THE MARS VALLES MARINERIS EXPLORER (VAMEX)
Luisa Buinhas, Bundeswehr University Munich, Germany

IAC-18.B2.3.3
A CONCEPT OF THE LUNAR NAVIGATION MOBILE NETWORK
Danijela Ignjatovic Stupar, International Space University (ISU), France

IAC-18.B2.3.4
BUILDING A PROTOTYPE CELL PHONE TOWER ON THE LUNAR BASE
SANDYA RAO, , India

IAC-18.B2.3.5
REMOTE AIRFIELDS NAVIGATION AND TOWER CONTROL THROUGH OPTICAL AND RADIO-FREQUENCY DATA FUSION
Paolo Marzioli, Sapienza University of Rome, Italy

IAC-18.B2.3.6
A SATELLITE SYSTEM WITH GROUND, AIRBORNE AND SPACE SUBSCRIBERS: A CONCEPTUAL SOLUTION AND MODELING OF TRAFFIC
Tatyana V. Labutkina, Dnepropetrovsk National University named after Oles' Gonchar, Ukraine

IAC-18.B2.3.7
RECENT DEVELOPMENT AND PROSPECT OF CHINA'S LOW-EARTH-ORBIT SATELLITE MOBILE COMMUNICATION AND SPACE INTERNET SYSTEM
Rui Ding, China Academy of Space Technology (CAST), China

IAC-18.B2.3.8
NEWSTARTS: STRATEGIC AND TECHNOLOGICAL APPROACHES FOR REINVIGORATING TELECOMMUNICATIONS FROM SPACE
James Bultitude, International Space University (ISU), United States

IAC-18.B2.3.10
DESIGN AND REALIZATION OF S-BAND COAXIAL MANIFOLD MULTIPLEXER FOR SMALL SATELLITES
Muhammad Latif, SUPARCO, Pakistan

IAC-18.B2.3.11
RESEARCH ON EVALUATION METHOD OF THE SATELLITE NAVIGATION LANDING SYSTEM INTEGRITY IN LABORATORY
Peng Lyu, Tianjin 764 Communication Navigation Technology Co., Ltd., China

IAC-18.B2.3.12
THE PERFORMANCE ANALYSIS OF 5G NETWORK BASED ON LEO CONSTELLATION WITH JOINT SIMULATION
Xiaotian ZHENG, Space Star Technology Co., Ltd. (SSTC), China Academy of Space Technology (CAST), China

B2.4. Advanced Satellite Services

October 3 2018, 14:45 — ÖVB 3

Co-Chair(s): *Eva Maria Aicher , Tesat-Spacecom GmbH & Co. KG, Germany; K.R. Sridhara Murthi , NIAS, India;*
Rapporteur(s): *Enrique Pacheco Cabrera , Incomspace, Mexico;*

IAC-18.B2.4.1
GALILEO HIGH ACCURACY: A PROGRAM AND POLICY PERSPECTIVE
Ignacio Fernandez Hernandez, European Commission, Belgium

IAC-18.B2.4.2 (non-confirmed)
MIRROR GALILEO PROGRAM IN ITALY
Mauro Cardone, Agenzia Spaziale Italiana (ASI), Italy

IAC-18.B2.4.3
SATELLITE NAVIGATION (GNSS) WORKING GROUP IN NASO
Narayan Dhital, , Germany

IAC-18.B2.4.4
HAPS FOR TELECOMMUNICATIONS SERVICES AND APPLICATIONS
Antonio Abad Martin, Hispasat SA, Spain

IAC-18.B2.4.5
ADVANCED SATELLITE SERVICES AS AN ENABLER TO BRING CONNECTIVITY TO RURAL COMMUNITIES IN MEXICO
Enrique Pacheco Cabrera, Incomspace, Mexico

IAC-18.B2.4.7
INNOVATIVE SUB-MILLIMETER LEVEL RANGING AND RANGE-RATE MEASUREMENTS OVER SATELLITE-GROUND PHASE MODULATION COHERENT LASER COMMUNICATION LINK FOR TT&C AND NAVIGATION SYSTEM
Haifeng Yang, Southwest Institute of Electronic Technology, China

IAC-18.B2.4.8
INTEGRATED SOLUTION OF COMMUNICATION AND FAULT ALARMING SYSTEM FOR CHINA SPACE STATION BASED ON BEIDOU SHORT MESSAGE SERVICE
Dan Wang, China Academy of Space Technology (CAST), China

IAC-18.B2.4.9
TELDASAT – INDUSTRY 4.0 FOR GLOBAL AND SAFETY CRITICAL MACHINES AND INFRASTRUCTURES
Ernst Messerschmid, University of Stuttgart, Germany

IAC-18.B2.4.10
HISPASAT H36W-1, ONE YEAR OF SUCCESSFUL IN-ORBIT OPERATION OF OHB'S FIRST GEOSTATIONARY TELECOMMUNICATION SATELLITE
Dieter Birreck, OHB System AG, Germany

B2.5. Space-Based Navigation Systems and Services

October 4 2018, 09:45 — ÖVB 3

Co-Chair(s): *Kristian Pauly , OHB System, Germany; Rita Lollock, The Aerospace Corporation, United States;*
Rapporteur(s): Norbert Frischauf, TU Graz, Austria;

IAC-18.B2.5.1
GALILEO SERVICE PROVISION: ONE YEAR UNDER GSA RESPONSIBILITY
Rodrigo da Costa, European GNSS Agency (GSA), Czech Republic

IAC-18.B2.5.2
GALILEO MESSAGE AND SIGNAL AUTHENTICATION SERVICES: A PROGRAM AND POLICY PERSPECTIVE
Ignacio Fernandez Hernandez, European Commission, Belgium

IAC-18.B2.5.4
SATELLITE BASED ADS-B FOR COMMERCIAL SPACE FLIGHT OPERATIONS
Dirk-Roger Schmitt, DLR (German Aerospace Center), Germany

IAC-18.B2.5.5
THE MULTI-GNSS SPACE SERVICE VOLUME
Daniel Blonski, ESTEC, European Space Agency, The Netherlands

IAC-18.B2.5.6
MEOSAR-NG: A POWERFUL NEW CONCEPT FOR SEARCH & RESCUE FROM MEO
Charlotte Bewick, OHB System AG, Germany

IAC-18.B2.5.7
A CUBESAT BASED GNSS CONSTELLATION FOR PLANETARY EXPLORATION
Norbert Frischauf, SpaceTec Partners SPRL, Austria

IAC-18.B2.5.8
OPTIMIZATION OF LOW EARTH ORBIT SATELLITE CONSTELLATIONS FOR REGIONAL POSITIONING
Tomer Shtark, Asher Space Research Institute, Technion, I.I.T., Israel

IAC-18.B2.5.10
INVESTIGATION ON SUSTAINING THE AUTONOMOUS SATELLITE NAVIGATION SYSTEM USING ONLY INTER-SATELLITE LINKS
Jingshi Tang, Nanjing University, China

B2.6. Near-Earth and Interplanetary Communications

October 4 2018, 14:45 — ÖVB 3

Co-Chair(s): *Manfred Wittig , European Space Agency (ESA), retired, The Netherlands; Ramon P. De Paula , National Aeronautics and Space Administration (NASA), United States;*
Rapporteur(s): *Dipak Srinivasan , The Johns Hopkins University Applied Physics Laboratory, United States;*

IAC-18.B2.6.2
DEEP SPACE MISSION UTILIZATION TO LAUNCH THE SMALLSAT NETWORK TO ADDRESS COMMUNICATION NEEDS.
Prasad Falke, International Amateur Radio Union, United States

IAC-18.B2.6.3
APPROACHES TO OPTIMIZE DEEP SPACE TELECOMMUNICATIONS NETWORKS TO SUPPORT A NEWSPACE PARADIGM
Chaitanya Gopal, International Space University (ISU), France

IAC-18.B2.6.4
INTERNET FOR THE MOON: POSSIBLE COMMUNICATION ARCHITECTURES FOR CONNECTING THE MOON VILLAGE TO THE INTERNET
Maria Drouet, Ecuadorian Civilian Space Agency (EXA), Ecuador

IAC-18.B2.6.5
RADIO SCIENCE SYSTEM DESIGN AND MEASUREMENT RESULTS FOR THE NASA DEEP SPACE NETWORK (DSN)
Remi LaBelle, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States

IAC-18.B2.6.6
SALSAT - AN INNOVATIVE NANOSATELLITE FOR SPECTRUM ANALYSIS BASED ON SDR TECHNOLOGY
Jens Großhans, Technische Universität Berlin, Germany

IAC-18.B2.6.7
NEW DEVELOPMENT OF THE PHASED ARRAY ANTENNA FOR S-BAND COMMUNICATIONS
Nobuyuki Kaya, Kobe University, Japan

IAC-18.B2.6.8
CONTACT PLAN BASED ROUTING IN DISTRIBUTED NANOSATELLITE SYSTEMS
Tobias Thiel, University of Würzburg, Germany

B2.7. Advanced Technologies for Space Communications and Navigation

October 5 2018, 09:45 — ÖVB 3

Co-Chair(s)*: Edward W. Ashford , Graz University of Technology (TU Graz), Austria; Elemer Bertenyi , Canadian Aeronautics and Space Institute, Canada;*
Rapporteur(s): *Nader Alagha , ESA, The Netherlands;*

IAC-18.B2.7.1
Optical communication to move large amounts of data in space
Herwig Zech, Tesat-Spacecom GmbH & Co. KG, Germany

IAC-18.B2.7.2
OPTICAL SWITCHES OF PHOTONICS PAYLOAD
Roland Le Goff, SODERN, France

IAC-18.B2.7.3
OPTICAL NETWORKS IN LEO BASED ON THE CUBESAT STANDARD
Richard Welle, The Aerospace Corporation, United States

IAC-18.B2.7.4
LED-BASED OPTICAL COMMUNICATION ON A NANO-SATELLITE PLATFORM
Andrea Gianfermo, Sapienza University of Rome, Italy

IAC-18.B2.7.5
INTER-SATELLITE COMMUNICATION FOR NANOSATELLITES - ADVANCED COMMUNICATION TECHNOLOGIES AND FREQUENCY SCHEMES REQUIRED FOR SCALING TO LARGE CONSTELLATIONS
Per Koch, GomSpace ApS, Denmark

IAC-18.B2.7.6
OPTIMIZATION OF SATELLITE COMMUNICATION LINK BY DIGITAL BEAM FORMING IN GROUND STATIONS
Usman Shehryar, Pakistan Space and Upper Atmosphere Research Commission, Pakistan

IAC-18.B2.7.7
VERY LARGE DEPLOYABLE ANTENNA ARRAY FOR NANOSATELLITES
Laurynas Maciulis, Vilnius Gediminas Technical University, Lithuania

IAC-18.B2.7.8
THE PRETTY SOFTWARE DEFINED RADIO SYSTEM AND ITS USE AS COMMUNICATION PLATFORM IN SPACE
Reinhard Zeif, Graz University of Technology (TU Graz), Austria
IAC-18.B2.7.9
APPLICATION OF TERAHERTZ TECHNOLOGY FOR COMMUNICATION AND DETECTION IN SPACE EXPLORATION
Meng CAO, China Aerospace Science & Industry Corporation (CASIC), China

IAC-18.B2.7.10
SPACEBORNE ANTENNA TECHNOLOGY FOR K- AND Q/V-BAND
Paolo Proietti Zolla, HPS GmbH, Germany

IAC-18.B2.7.11
SATELLITE CONSTELLATION FOR 5G IN THE SOUTH AMERICAN REGION
Paola Andrea Escobari Vargas, Agencia Boliviana Espacial, Bolivia

IAC-18.B2.7.12
ARCHITECTURE OF NEW GENERATION DATA RELAY SATELLITE SYSTEM
Zhengan Zhai, China Satellite Launch and TT&C General (CLTC), China

B2.8-GTS.3. Space Communications and Navigation Global Technical Session

October 2 2018, 14:45 — ÖVB 4

Co-Chair(s): *Edward W. Ashford , Graz University of Technology (TU Graz), Austria; Kevin Shortt , , Germany;*
Rapporteur(s): *Stephanie Wan , Space Generation Advisory Council (SGAC), United States;*

IAC-18.B2.8-GTS.3.1
INITIAL ON-ORBIT RESULTS OF A COMMERCIAL DATA-RELAY
Justin Oliveira, Analytical Space, United States

IAC-18.B2.8-GTS.3.1
HOW IMPROVE TROPOSPHERIC DELAY ESTIMATION FROM GNSS RECEIVERS SIGNAL TO NOISE RATIO
Francesco Vespe, Agenzia Spaziale Italiana (ASI), Italy

IAC-18.B2.8-GTS.3.2
MATHEMATICAL MODEL TO ESTIMATE THE VENESAT-1 TRANSPONDERS ANODE VOLTAGE EVOLUTION IN ORBIT OPERATION
Carlos Burguillos, Regional Centre for Space Science and Technology Education in Asia and the Pacific (RCSSTEAP), China

IAC-18.B2.8-GTS.3.3
NOVEL BEAM STEERING APPLICATIONS FOR DRONE FSOC USING RISLEY PRISMS.
Nathaniel Shearer, The University of Adelaide, Australia

IAC-18.B2.8-GTS.3.4
LONG-TERM EVOLUTION SAFETY ANALYSIS AND DISPOSAL ORBIT DESIGN METHOD OF BDS MEO SATELLITE ORBITS
Min Hu, Equipment Academy, China

IAC-18.B2.8-GTS.3.5
REFINED COMPUTER SIMULATION OF LOSS IN QUANTUM-BASED SATELLITE CHANNEL
Andras Kiss, University of West Hungary, Hungary

IAC-18.B2.8-GTS.3.6
USING A GPS ENABLED BODY AREA NETWORK (BAN) BASED HEALTH TRACKER, THAT USES GSM, FOR MOUNTAINEERS IN NEPAL
Prabin Gyawali, Space Generation Advisory Council (SGAC), Nepal

IAC-18.B2.8-GTS.3.8
WIDE BEAMWIDTH QHA FOR RS SATELLITES AND GROUND STATION APPLICATIONS
Ahsan Rafiq, SUPARCO, Pakistan

IAC-18.B2.8-GTS.3.9 (non-confirmed)
MONOCULAR DEPTH ESTIMATION USING DEEP LEARNING FOR LUNAR LANDING
Alix LEROY, Cranfield University, United Kingdom

IAC-18.B2.8-GTS.3.11
TARGET ACQUISITION AND TRACKING OF EXTREMELY LONG DISTANCE TARGETS USING MULTIPLE RISLEY PRISM SYSTEMS
Luke Heffernan, The University of Adelaide, Australia

IAC-18.B2.8-GTS.3.12
KEY CHALLENGES IN ESTABLISHING LASER SPACE COMMUNICATION STANDARDS AND RECOMMENDATIONS OF THE SGC SPACE TECHNOLOGIES WORKING GROUP
Graham Johnson, Inmarsat Ltd., United Kingdom

B3. IAF HUMAN SPACEFLIGHT SYMPOSIUM

Coordinator(s): *Kevin D. Foley , The Boeing Company, United States;*

Support(s): *Igor V. Sorokin , S.P. Korolev Rocket and Space Corporation Energia, Russian Federation; Peter Batenburg , Netherlands Space Society (NVR), The Netherlands;*

B3.1. Governmental Human Spaceflight Programs (Overview)

October 1 2018, 15:00 — ZARM 4

Co-Chair(s): *Carlo Mirra , Airbus Defence & Space, Germany; Sam Scimemi , National Aeronautics and Space Administration (NASA), United States;*
Rapporteur(s): *Rainer Willnecker , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*

IAC-18.B3.1.1
ORION DEVELOPMENT STATUS AND ROLE IN THE LUNAR ORBITAL PLATFORM
Mark Kirasich, NASA, United States

IAC-18.B3.1.2
THE SECOND EUROPEAN SERVICE MODULE (ESM-2) EVOLUTIONS, PRODUCTION AND CHALLENGES
Anthony Thirkettle, European Space Agency (ESA), The Netherlands

IAC-18.B3.1.3
CANADA AND THE INTERNATIONAL SPACE STATION PROGRAM: OVERVIEW AND STATUS SINCE IAC 2017
Kristen Facciol, Canadian Space Agency, Canada

IAC-18.B3.1.4
MOVING HUMAN PRESENCE INTO THE SOLAR SYSTEM: FROM ISS TO THE MOON AND ONTO MARS
William H. Gerstenmaier, National Aeronautics and Space Administration (NASA), United States

IAC-18.B3.1.5
JAXA'S INITIATIVE ON HUMAN SPACEFLIGHT PROGRAM FOR ISS AND BLEO
Koichi Wakata, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.B3.1.6
COMMERCIAL PARTNERSHIPS FOR SPACE EXPLORATION
Bernhard Hufenbach, European Space Agency (ESA), The Netherlands

IAC-18.B3.1.7
EXPLORATION MISSION FLIGHT TEST OPERATIONS OVERVIEW
Michael Sarafin, National Aeronautics and Space Administration (NASA), United States

IAC-18.B3.1.8
THE GATEWAY POWER AND PROPULSION ELEMENT DEVELOPMENT STATUS
Michele Gates, NASA Headquarters, United States

B3.2. Commercial Human Spaceflight Programs

October 2 2018, 09:45 — ZARM 4
Co-Chair(s): Michael E. Lopez Alegria , MLA Space, LLC, United States; Michael W. Hawes , Lockheed Martin Corporation, United States; Sergey K. Shaevich , Khrunichev State Research & Production Space Center, Russian Federation;
Rapporteur(s): Gene Rice , RWI - Rice Wigbels Int'l, United States;

IAC-18.B3.2.1
STARLINER - PREPARING FOR FLIGHT
Chrisopher Ferguson, Boeing, United States

IAC-18.B3.2.2
MULTI-PURPOSE COMMERCIAL MODULES
Alexander G. Derechin, S.P. Korolev Rocket and Space Corporation Energia, Russian Federation

IAC-18.B3.2.3
THE INTERNATIONAL SPACE STATION AND LOW EARTH ORBIT
Sam Scimemi, National Aeronautics and Space Administration (NASA), United States

IAC-18.B3.2.4
PREPARING FOR AMERICA'S RETURN TO HUMAN SPACEFLIGHT
Daniel Adams, United Launch Alliance, United States

IAC-18.B3.2.5
THE INTERACTION OF INDUSTRY AND SCIENCE IN EXPERIMENTS MODELING LONG-TERM SPACE FLIGHTS AS A POTENTIAL FOR CREATING COMMERCIAL INNOVATIONS
Anna Kussmaul, , Russian Federation

IAC-18.B3.2.6 (non-confirmed)
BLOON, A VERSATILE PLATFORM FOR NEAR SPACE HUMAN RESEARCH AND LEISURE
Jose Mariano Lopez Urdiales, Zero2infinity, Spain

IAC-18.B3.2.7
THE DAWN OF SPACE TOURISM BUSINESSES AND THE DEVELOPMENT STRATEGY IN REFERENCE TO AIR TOURISM BUSINESSES
Toshiki Hasegawa, HASECOM, Japan

IAC-18.B3.2.8
RUSSIAN COMMERCIAL PROGRAMS IN THE FIELD OF MANNED FLIGHT OPPORTUNITIES - UNIQUE EXPERTISE AND COMPREHENSIVE RANGE OF SERVICES
Anna Zakharova, JSC Glavcosmos, Russian Federation

IAC-18.B3.2.9
SUBORBITAL SPACE TOURISM - A COMMERCIAL FEASIBILITY ASSESSMENT
Markus Guerster, Massachusetts Institute of Technology (MIT), United States

IAC-18.B3.2.10
THE EXPERIMENT AND SCIENCE PROGRAM FOR THE "ASTRONAUTIN" COMMERCIAL HUMAN SPACEFLIGHT MISSION
Detlev Hueser, Stiftung erste deutsche Astronautin gGmbH, Germany

IAC-18.B3.2.11
A NEW COMMERCIAL SPACEFLIGHT EXTRAVEHICULAR ACTIVITIES TRAINING PROGRAM
Charles Lauer, Blue Abyss, United States

IAC-18.B3.2.12
SPACESHIPTWO: A SUBORBITAL VEHICLE FOR HUMAN SPACEFLIGHT AND MICROGRAVITY RESEARCH
Sirisha Bandla, Virgin Galactic L.L.C, United States

IAC-18.B3.2.13
SEVERAL IDEAS FOR DEVELOPING COMMERCIAL SPACE TOURISM BASED ON DIFFERENT SPACE ACTIVITIES
Wenyi CAI, China Academy of Launch Vehicle Technology(CALT), China

B3.3. Utilization & Exploitation of Human Spaceflight Systems

October 2 2018, 14:45 — ZARM 4

Co-Chair(s): *Cristian Bank , Eumetsat, Germany; Eleanor Morgan , , United States;*

IAC-18.B3.3.1
FORECASTING FUTURE COMMERCIAL AND GOVERNMENT DEMAND IN LOW EARTH ORBIT
Robyn Gatens, NASA, United States

IAC-18.B3.3.2
UNITED NATIONS/CHINA COOPERATION ON UTILIZATION OF THE CHINA SPACE STATION
Aimin NIU, United Nations Office for Outer Space Affairs, Austria

IAC-18.B3.3.3
UPDATED BENEFITS FOR HUMANITY FROM THE INTERNATIONAL SPACE STATION (FROM THE ISS PROGRAM SCIENCE FORUM)
David Brady, National Aeronautics and Space Administration (NASA), Johnson Space Center, United States

IAC-18.B3.3.4
M.Y. BELYAEV, M.V.CHEREMISIN INTEGRATED MONITORING OF EARTH SURFACE FROM ONBOARD ISS RS
Maksim Cheremisin, RSC Energia, Russian Federation

IAC-18.B3.3.6
KIBO UTILIZATION STRATEGY TO MAXIMIZE OUTCOMES
Sayaka Umemura, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.B3.3.7
FROM BLUE DOT TO HORIZONS - GERMANY ON THE ISS
Volker Schmid, DLR (German Aerospace Center), Germany

IAC-18.B3.3.9
EXPRESS METHOD TO ESTABLISH THE TRACE CONTAMINANTS EXPOSURE LIMITS IN THE AIR OF LONG-TERM ORBITAL STATIONS
DMITRY OZEROV, IBMP, Russian Federation

IAC-18.B3.3.11
ICE CUBES – INTERNATIONAL COMMERCIAL EXPERIMENT SERVICE FOR FAST-TRACK, SIMPLE AND AFFORDABLE ACCESS TO SPACE FOR RESEARCH – STATUS AND EVOLUTION
Hilde Stenuit, Space Applications Services N.V./S.A., Belgium

IAC-18.B3.3.12
INVESTIGATION OF GRAVITATION EFFECTS ON QUANTUM ENTANGLEMENT ON THE ISS - SPACEQUEST
Norbert M.K. Lemke, OHB System AG - Munich, Germany

B3.4-B6.5. Flight & Ground Operations of HSF Systems (A Joint Session of the Human Spaceflight and Space Operations Symposia)

October 3 2018, 09:45 — ZARM 4

Co-Chair(s): *Annamaria Piras , Thales Alenia Space Italia, Italy; Dieter Sabath , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Thomas A.E. Andersen , Danish Aerospace Company ApS, Denmark;*

IAC-18.B3.4-B6.4.2
COLUMBUS OPERATION AS BASIS FOR FUTURE EXPLORATION
Gerd Söllner, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.B3.4-B6.4.3
HORIZONS MISSION – CHALLENGES AND HIGHLIGHTS
Jan Marius Bach, DLR (German Aerospace Center), Germany

IAC-18.B3.4-B6.4.4
COMMERCIALIZATION IN COLUMBUS: LOOKING BEFORE LEAPING
Nadia This, GMV-Insyen for German Space Operations Center (DLR/GSOC), Germany

IAC-18.B3.4-B6.4.5
ALTEC EUROPEAN LOGISTICS CENTER SUPPORTING COLUMBUS OPERATIONS
Rosa Sapone, Altec S.p.A., Italy

IAC-18.B3.4-B6.4.6 (non-confirmed)
UTILIZATION OF THE INTERNATIONAL SPACE STATION FOR CREW AUTONOMOUS SCHEDULING TEST (CAST)
Matthew Healy, United Space Alliance, United States

IAC-18.B3.4-B6.4.7
NEW EXTERNAL PAYLOAD PLATFORM BARTOLOMEO ON THE INTERNATIONAL SPACE STATION
Christian Steimle, Airbus Defence and Space, Germany

IAC-18.B3.4-B6.4.8
PAYLOAD OPERATIONS CENTER - LESSONS FROM COMMERCIAL ENGAGEMENT
Bobby Watkins, NASA, United States

IAC-18.B3.4-B6.4.9
CADMOS, THE FRENCH USOC: AN OUTLOOK ON NEW PROSPECTS AFTER A QUARTER CENTURY HISTORY.
Mauro Augelli, Centre National d'Etudes Spatiales (CNES), France

IAC-18.B3.4-B6.4.10
HIGH RATE DATA BROKER FOR FSL OPERATIONS
Michel Kruglanski, Belgian Institute for Space Aeronomy (BISA), Belgium

IAC-18.B3.4-B6.4.11
A COST EFFECTIVE METHODOLOGY FOR BUILDING FLIGHT SPARES FOR ROBOTIC LIFE EXTENSION ON THE INTERNATIONAL SPACE STATION
Vivian Truong, MDA Corporation, Canada

IAC-18.B3.4-B6.4.12
SAFEGUARDING FOR CONTINGENCY DEORBIT CAPABILITY AFTER AN ISS DEPRESSURIZATION FAILURE
Ulhas Kamath, Boeing, United States

B3.5. Astronaut Training, Accommodation, and Operations in Space

October 4 2018, 09:45 — ZARM 4

Co-Chair(s): *Alan T. DeLuna , ATDL Inc., United States; Igor V. Sorokin , S.P. Korolev Rocket and Space Corporation Energia, Russian Federation;*
Rapporteur(s): *Keiji Murakami , Japan Aerospace Exploration Agency (JAXA), Japan;*

IAC-18.B3.5.1
EUROPEAN MAINTENANCE AND REPAIR SKILLS COURSE FOR ASTRONAUTS
Manuela Aguzzi, Space Applications Services N.V./S.A., Belgium

IAC-18.B3.5.2 (non-confirmed)
PRE-FLIGHT TRAINING OF AUTONOMIC RESPONSES FOR MITIGATING THE EFFECTS OF SPATIAL DISORIENTATION DURING SPACEFLIGHT
Patricia Cowings, National Aeronautics and Space Administration (NASA), Ames Research Center / USRA, United States

IAC-18.B3.5.3
WAYS OF PROFESSIONAL INTERACTION OF COSMONAUTS WITH AN ANTHROPOMORPHOUS ROBOT OF SPACE PURPOSE IN A MASTER-SLAVE MODE
Andrey Kuritsin, Gagarin Cosmonaut Training Center, Russian Federation

IAC-18.B3.5.4
ANALYSIS OF THE STRAPS AND BUCKLES RATIONAL SCHEME SYSTEM OF SPACE CAPSULE (DESCENT MODULE) SEATS FOR COSMONAUTS
Tatiana Volkova, Ecole Polytechnique Fédérale de Lausanne (EPFL), Swiss Space Center (SSC), Switzerland

IAC-18.B3.5.6
HIGH-FIDELITY ANALOG MISSION ENABLING PRACTICES: LESSON LEARNED FROM RECENT ANALOGS AND GUIDELINES FOR FUTURE MISSIONS
Hady Ghassabian Gilan, Space Exploration Project group, Space Generation Advisory Council (SGAC), Italy

B3.6-A5.3. Human and Robotic Partnerships in Exploration - Joint session of the Human Spaceflight and Exploration Symposia

October 4 2018, 14:45 — ZARM 4

Co-Chair(s): *Christian Sallaberger , Canadensys Aerospace Corporation, Canada;*
Rapporteur(s): *Mark Hempsell , The British Interplanetary Society, United Kingdom;*

IAC-18.B3.6-A5.3.1
ASTROBEE: CURRENT STATUS AND FUTURE USE AS AN INTERNATIONAL RESEARCH PLATFORM
Andres Mora Vargas, NASA Ames Research Center, United States

IAC-18.B3.6-A5.3.2
GNC SYSTEM DESIGN FOR THE CREW INTERACTIVE MOBILE COMPANION (CIMON)
Valerie Schröder, Airbus DS GmbH, Germany

IAC-18.B3.6-A5.3.3
TELEROBOTIC OPERATIONS WITH TIME DELAY, RESULTS FROM THE ISECG GAP ASSESSMENT TEAM
Laurie Metcalfe, Canadian Space Agency, Canada

IAC-18.B3.6-A5.3.5
THE ROBOT AS AN AVATAR OR CO-WORKER? AN INVESTIGATION OF THE DIFFERENT TELEOPERATION MODALITIES THROUGH THE KONTUR-2 AND METERON SUPVIS JUSTIN SPACE TELEROBOTIC MISSIONS
Neal Lii, German Aerospace Center (DLR), Germany

IAC-18.B3.6-A5.3.7
QUANTIFYING PERFORMANCE IN HUMAN-ROBOTIC INTEGRATED OPERATIONS FOR SPACEFLIGHT APPLICATIONS: A MISSION-DRIVEN APPROACH
Shahrzad Hosseini, European Space Agency (ESA), The Netherlands

IAC-18.B3.6-A5.3.8
THE DEVELOPMENT OF VIRTUAL REALITY DEMONSTRATOR FOR ROBOTICS TRAINING AT THE EUROPEAN ASTRONAUT CENTRE
Sander Coene, ESA, Germany

AC-18.B3.6-A5.3.9
A SYMBIOTIC HUMAN AND MULTI-ROBOT PLANETARY EXPLORATION SYSTEM
Jacopo Panerati, Ecole Polytechnique de Montreal, Canada

IAC-18.B3.6-A5.3.10 (non-confirmed)
HUMAN ROBOTIC PARTNERSHIP INVESTIGATIONS DURING ILEWG EUROMOONMARS SIMULATION CAMPAIGNS 2016-2018
Bernard Foing, ESA/ESTEC, ILEWG & VU Amsterdam, The Netherlands

IAC-18.B3.6-A5.3.11
RESEARCH ON BRAIN-ACTUATED ROBOTIC IN HUMAN SPACEFLIGHT ENDEAVORS
Chuanfeng Wei, Institute of Manned Space System Engineering,China Academy of Space Technology (CAST), China

B3.7. Advanced Systems, Technologies, and Innovations for Human Spaceflight

October 5 2018, 09:45 — ZARM 4

Co-Chair(s): *Juergen Schlutz , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Sebastien Barde , Centre National d'Etudes Spatiales (CNES), France;*
Rapporteur(s): *Gi-Hyuk Choi , Korea Aerospace Research Institute (KARI), Korea, Republic of;*

IAC-18.B3.7.1
STATUS OF THE LIFE SUPPORT RACK ACLS FOR ACCOMMODATION ON THE ISS AND BEYOND
Klaus Bockstahler, Airbus Defence & Space, Space Systems, Germany

IAC-18.B3.7.2
REGENERATIVE ECLSS SYSTEM BASED ON ACCELERATED PLANT GROWTH AND PROCESSING OF ORGANIC WASTE
Thomas Lagarde, University of Houston, United States

IAC-18.B3.7.3
CRYOGENIC AIR PURIFICATION FOR DEEP SPACE EXPLORATION.
Yan Pennec, Air Liquide, France

IAC-18.B3.7.4
THE ADVANCED MULTICOMPONENT AIR ANALYSER ANITA2 ON ITS WAY TO ISS
Michael Gisi, OHB System AG, Germany

IAC-18.B3.7.5
BIOCONTAMINATION INTEGRATED CONTROL OF WET SYSTEMS FOR SPACE EXPLORATION (BIOWYSE)
Emmanouil Detsis, European Science Foundation (ESF), France

IAC-18.B3.7.6
A COMPARATIVE GROUND STUDY OF PROTOTYPE AUGMENTED REALITY TASK GUIDANCE FOR INTERNATIONAL SPACE STATION STOWAGE OPERATIONS
Hiroshi Furuya, Columbia University, United States

IAC-18.B3.7.7
ARAMIS - AUGMENTED REALITY APPLICATION FOR MAINTENANCE, INVENTORY AND STOWAGE
Annamaria Piras, Thales Alenia Space Italia, Italy

IAC-18.B3.7.8
CIMON – A MOBILE ARTIFICIAL INTELLIGENT CREW MATE FOR THE ISS
Till Eisenberg, Airbus Defence and Space - Space Systems, Germany

IAC-18.B3.7.10
FUNDAMENTIALS OF IN-SPACE ADDITIVE MANUFACTURING
Anton Pogrebnoi, Central Research Institute of Machine Building (TSNIIMASH), Russian Federation

IAC-18.B3.7.11
FLEXIBLE, MULTI-FUNCTIONAL, MULTI-BAND AND RECONFIGURABLE SPACE RF EXPERIMENTAL PAYLOAD FOR MANNED SPACE SCIENCE AND APPLICATION SYSTEM
Chai Lin, Southwest Institute of Electronic Technology, China

IAC-18.B3.7.12
HYPERION: ARTIFICIAL GRAVITY REUSABLE CREWED DEEP SPACE TRANSPORT
Gedi Minster, University of Southern California, United States

IAC-18.B3.7.13
ESS: A SETTLEMENT SITE SELECTION TOOL FOR A MANNED MARS BASE
Matthias Noeker, Delft University of Technology (TU Delft), Germany

IAC-18.B3.7.14
EDEN ISS – FROM A SIMULATION TESTBED TO AN ADVANCED EXPLORATION DESIGN CONCEPT FOR A GREENHOUSE FOR MOON AND MARS
Anna Barbara Imhof, Liquifer Systems Group (LSG), Austria

B3.8-E7.7. Legal framework for collaborative space activities - New ways of launching (micro-launching) and large constellation microsats (Joint IAF/IISL session)

October 5 2018, 13:30 — ZARM 4

Co-Chair(s): *Philippe Clerc , Centre National d'Etudes Spatiales (CNES), France; Tony Azzarelli , Oneweb, United Kingdom;*
Rapporteur(s): *Kamlesh Brocard , Swiss Space Office (SSO), Switzerland;*

IAC-18.B3.8-E7.7.1
THE FUTURE OF THE LEGAL FRAMEWORK IN THE SPACE ACTIVITIES
J Humberto Castro Villalobos, Embajada de México, Mexico

IAC-18.B3.8-E7.7-B3.8.2
"LEVIATHAN LITE" - TOWARDS A GLOBAL STEWARDSHIP ORGANIZATION FOR SPACE DOMAIN AWARENESS, CONDUCT, AND REMEDIATION
Harrison Kearby, The Ohio State University College of Engineering, United States

IAC-18.B3.8-E7.7-B3.8.3
A NEW APPROACH TO NATIONAL LAWS AIMED AT ENCOURAGING SMALL SATELLITES' SPACE ACTIVITIES
Helena Correia Mendonça, Vieira de Almeida & Associados, Portugal

IAC-18.B3.8-E7.7-B3.8.4
SMALL SATELLITE ACTIVITIES AND LEGAL CHALLENGES REGARDING THE STATES RESPONSIBILITY
Hamid Kazemi, Aerospace Research Institute, Ministry of Science, Research and Technology, Iran

IAC-18.B3.8-E7.7-B3.8.5
THE PRINCIPLE OF NON-APPROPRIATION AND THE EXCLUSIVE USES OF LEO BY LARGE SATELLITE CONSTELLATION
Yuri Takaya-Umehara, The University of TOKYO, Graduate school, Japan

IAC-18.B3.8-E7.7-B3.8.6
THE ITU SPACE REGULATION - A KEY ELEMENT TO ACCESS SPACE
Attila MATAS, , Switzerland

IAC-18.B3.8-E7.7-B3.8.8
OUTER SPACE SARPS: A STEP TOWARDS HARMONIZATION OF NATIONAL REGULATIONS FOR THE ENHANCEMENT OF SUSTAINABILITY OF THE SPACE ENVIRONMENT
Gilles Doucet, Institute of Air and Space Law, McGill University, Canada

IAC-18.B3.8-E7.7.10
5 YEARS INTO THE EAR: OPPORTUNITIES FOR INTERNATIONAL COLLABORATION THROUGH EXPORT CONTROL REFORM
Mitchell Scher, Planet, United States

IAC-18.B3.8-E7.7.11
LEGAL AND POLICY PERSPECTIVES ON CIVIL-MILITARY COOPERATION FOR THE ESTABLISHMENT OF SPACE TRAFFIC MANAGEMENT
Ntorina Antoni, Eindhoven University of Technology, The Netherlands

IAC-18.B3.8-E7.7.12
FINANCING SPACE START-UPS IN THE US: LEGAL BARRIERS AND OPPORTUNITIES FOR PUBLIC AND PRIVATE FUNDS
Eytan Tepper, Institute of Air and Space Law, McGill University, Canada

IAC-18.B3.8-E7.7.13
COMMERCIAL OOS AND ITS FUTURE: POLICY AND LEGAL ISSUES BEYOND LIFE EXTENSION
Olga Stelmakh-Drescher, International Institute of Space Commerce, United States

IAC-18.B3.8-E7.7.14
REGULATORY ASPECTS IN LAUNCH SERVICE CONTRACTS FOR MICRO-SATELLITES IN COMPLIANCE WITH INTERNATIONAL LEGAL FRAMEWORK--SUCCESSFUL DOCKING IN LEGAL SPACE?
Kang Duan, China Great Wall Industry Corporation (CGWIC), China

B3.9-GTS.2. Human Spaceflight Global Technical Session

October 3 2018, 14:45 — ÖVB 4

Co-Chair(s): *Andrea Jaime , OHB System AG - Munich, Germany; Guillaume Girard , Zero2infinity, Spain;*

IAC-18.B3.9-GTS.2.1
LESSONS LEARNED FROM THE ISS ENABLING FUTURE SPACEFLIGHT COLLABORATION FOR US AND RUSSIA
Carolina Moreno Aguirre, Skolkovo Institute of Science and Technology, Russian Federation

IAC-18.B3.9-GTS.2.2
THE FREE FLYER ELEMENT OF DLR'S ORBITAL HUB CONCEPT: DESIGNED FOR SCIENCE OPPORTUNITIES AND MORE
Dominik Quantius, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.B3.9-GTS.2.3
PEACE - PLANETARY EXPLORATION IN ASTRONAUTICAL CAVE ENVIRONMENTS: A FIRST HOME FOR ASTRONAUTS IN LUNAR LAVA TUBES
Bernadette Joy Detera, Space Generation Advisory Council (SGAC), The Philippines

IAC-18.B3.9-GTS.2.4
DEVELOPMENT OF A LUNAR SURFACE ARCHITECTURE AS A "PROVING GROUND" FOR FUTURE MARS MISSIONS
Abhinav Prakash, University of Houston, United States

IAC-18.B3.9-GTS.2.5
MANNED MARS MISSION RISKS EVALUATION
Guzel Kamaletdinova, Tambov State Technical University, Russian Federation

IAC-18.B3.9-GTS.2.6
BENEFITS OF A DEEP SPACE GATEWAY IN SUSTAINABLE LUNAR EXPLORATION
Matthew Duggan, The Boeing Company, United States

IAC-18.B3.9-GTS.2.7
THE ORION MPCV-ESM CONSUMABLES STORAGE SUBSYSTEM – PATH TOWARD ESM-1 MISSION
Olivier Faure, Airbus DS GmbH, Germany

IAC-18.B3.9-GTS.2.8
INTRODUCTION TO MANNED ENVIRONMENT AND SCIENTIFIC EXPERIMENTAL RESOURCES OF CHINESE SPACE STATION
Hong Yang, Institute of Manned Space System Engineering,China Academy of Space Technology (CAST), China

IAC-18.B3.9-GTS.2.9
CARGO LOADING DESIGN AND FUTURE APPLICATION OF CHINA TIANZHOU CARGO SPACECRAFT
Zhang Jian, Institute of Manned Space System Engineering,China Academy of Space Technology (CAST), China

IAC-18.B3.9-GTS.2.10
ADDRESSING KEY PSYCHOLOGICAL AND PHYSIOLOGICAL FACTORS IN PREPARATION FOR LONG DURATION MANNED MISSIONS - SUGGESTED ADAPTATION OF CURRENT ASTRONAUT TRAINING
Aline Decadi, HE Space Operations, France

IAC-18.B3.9-GTS.2.11
HUMAN FACTORS FOR SPACE
Irene Lia Schlacht, Politecnico di Milano, Italy

IAC-18.B3.9-GTS.2.12
DENTAL HEALTHCARE IN SPACE
Linda Dao, International Space University (ISU), Canada

IAC-18.B3.9-GTS.2.13
NOT JUST FUNCTIONAL, NUTRITIOUS, BUT ALSO EXPERIENTIAL: DESIGNING EATING EXPERIENCES FOR SPACE TRAVEL
Marianna Obrist, University of Sussex, United Kingdom

IAC-18.B3.9-GTS.2.14
THE CONCEPT OF AN INTEGRATED INTELLIGENT HEALTH EVALUATION AND SUPPORT PLATFORM FOR DEEP SPACE EXPLORATION
Seyed Ali Nasseri, Space Generation Advisory Council (SGAC), Canada

IAC-18.B3.9-GTS.2.15
THE AGENCY OF HUMAN-ROBOTIC LUNATICS
Sarah Jane Pell, ESA Topical Team Arts & Science, Australia

B4. 25th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS

Coordinator(s): *Alex da Silva Curiel , Surrey Satellite Technology Ltd (SSTL), United Kingdom; Rhoda Shaller Hornstein , , United States;*

B4.1. 19th Workshop on Small Satellite Programmes at the Service of Developing Countries

October 2 2018, 09:45 — ZARM 2

Co-Chair(s): *Hui Du , United Nations Office for Outer Space Affairs, Austria; Sias Mostert , Space Commercial Services Holdings (Pty) Ltd, South Africa;*
Rapporteur(s): *Danielle Wood , Massachusetts Institute of Technology (MIT), United States; Pierre Molette , , France; Sergei Chernikov , United Nations Office for Outer Space Affairs, Austria;*

IAC-18.B4.1.1
THE INTERNATIONAL DIMENSION OF OUTER SPACE ACTIVITIES: CAPACITY BUILDING IN SPACE LAW AND POLICY FOR SMALL SATELLITE DEVELOPERS
Werner R. Balogh, World Meteorological Organization (WMO), Switzerland

IAC-18.B4.1.3
AN INSPIRING EARTH OBSERVATION MISSION OF TURKEY, GÖKTÜRK-2; NEW OPPORTUNITY FOR SPACE APPLICATION COMMUNITY
Tamer Özalp, , Turkey

IAC-18.B4.1.4
TESTING AND OPERATIONS OF A STORE AND FORWARD CUBESAT FOR ENVIRONMENTAL MONITORING OF COSTA RICA
Marco Gomez Jenkins, Costa Rica Institute of Technology (ITCR), Costa Rica

IAC-18.B4.1.5
NANO-SATELLITES ROLE IN CHILE'S SPACE CAPACITY BUILDING ROADMAP
Alejandro Lopez Telgie, Universidad de Concepción, Chile

IAC-18.B4.1.6
THE AFRICAN RESOURCE MANAGEMENT CONSTELLATION – THE IMPACT OF TECHNOLOGY ADVANCES
Sias Mostert, Space Commercial Services Holdings (Pty) Ltd, South Africa

IAC-18.B4.1.7
PROMOTING INNOVATIVE SPACE-BASED SOLUTIONS AND SPACE EDUCATION IN FUTA
Oniosun Temidayo Isaiah, Federal University of Technology Akure, Ondo state, Nigeria, Nigeria

IAC-18.B4.1.8
DESIGN, DEVELOPMENT, TESTS AND FIRST FLIGHT RESULTS OF 1KUNS-PF, THE FIRST KENYAN UNIVERSITY CUBESAT
Armando Grossi, Sapienza University of Rome, Italy

IAC-18.B4.1.9
POSSIBLE PLAN OF SPACE TECHNOLOGY DEVELOPMENT IN MONGOLIA CORRESPONDING THE COUNTRY'S FEATURES
Erdenebaatar Dashdondog, , Mongolia

IAC-18.B4.1.10
PRELIMINARY SYSTEM DESIGN OF A "SWEET" CUBESAT
Ahmed Farid, Telespazio VEGA Deutschland GmbH, Germany

IAC-18.B4.1.11
THE UNISEC-GLOBAL NEW VISION 2030-ALL
Rei Kawashima, UNISEC-Global, Japan

IAC-18.B4.1.12
HEPTA-SAT TRAINING PROGRAM: INTERNATIONAL KNOWLEDGE TRANSFER USING HANDS-ON TYPE CUBESAT EDUCATION
Masahiko Yamazaki, Nihon University, Japan

IAC-18.B4.1.13
BIRDS PROJECT AS PLATFORM TO DEVELOP AND DEPLOY THE FIRST SATELLITES OF FOUR SOUTH ASIAN NATIONS
George Maeda, Kyushu Institue of Technology, Japan

IAC-18.B4.1.14
FOREST MONITORING OF TIPNIS - BOLIVIA, WITH THE USE OF A SMALL SATELLITE WITH MULTISPECTRAL CAMERA
Natalia Indira Vargas-Cuentas, Beihang University (BUAA), China

B4.2. Small Space Science Missions

October 1 2018, 15:00 — ZARM 2

Co-Chair(s): *Larry Paxton , The Johns Hopkins University Applied Physics Laboratory, United States; Stamatios Krimigis , The Johns Hopkins University Applied Physics Laboratory, United States;*
Rapporteur(s): *Roberta Mugellesi-Dow , European Space Agency (ESA), United Kingdom;*

IAC-18.B4.2.1
NASA'S STRATEGIC SCIENCE ACTIVITIES AND ACCOMPLISHMENTS WITH SMALL SATELLITES
Charles Norton, NASA Headquarters, United States

IAC-18.B4.2.2
SOAR -- A Satellite for Orbital Aerodynamics Research
Nicholas H. Crisp, The University of Manchester, United Kingdom

IAC-18.B4.2.3
IONOSPHERE IRREGULARITY OBSERVATION USING REFERENCE SIGNALS FROM CUBESAT CONSTELLATION
Rahmi Rahmatillah, LaSEINE, Kyushu Institute of Technology, Japan

IAC-18.B4.2.4
SPACE-BASED SOLAR NEUTRON OBSERVATIONS FOR CUBESAT PROJECT
Kikuko Miyata, Nagoya University, Japan

IAC-18.B4.2.5
SMALL SATELLITE CONSTELLATION FOR SPACE SITUATIONAL AWARENESS
Alexander Priest, Inovor Technologies, Australia

IAC-18.B4.2.6
IDEASSAT - A 3U CUBESAT FOR IONOSPHERIC SCIENCE AND CAPACITY BUILDING
Loren Chang, , Taiwan, China

IAC-18.B4.2.7
AAREST AUTONOMOUS ASSEMBLY RECONFIGURABLE SPACE TELESCOPE FLIGHT DEMONSTRATOR
Craig Underwood, Surrey Space Centre, University of Surrey, United Kingdom

IAC-18.B4.2.8
MONITORING OF GAMMA-RAY BURSTS WITH A FLEET OF NANOSATELLITES
Norbert Werner, , Hungary

IAC-18.B4.2.9
TRIMETRIC TOMOGRAPHY OF THE MARTIAN IONOSPHERE USING CUBESATS
Edgar Bering, University of Houston, United States

IAC-18.B4.2.10
ANALYSIS OF THE USE OF COTS BASED CUBESATS IN A DEEP SPACE MISSION: DUSTCUBE, A NANOSATELLITE MISSION TO 65803 DIDYMOS BINARY ASTEROID AS PART OF THE ESA AIM MISSION.
Franco Pérez-Lissi, University of Vigo, Spain

IAC-18.B4.2.11
HERMES: CUBESATS CONSTELLATION ENABLING MULTI-MESSENGER ASTROPHYSICS
Michèle Lavagna, Politecnico di Milano, Italy

IAC-18.B4.2.12
QUBE - QUANTUM KEY DISTRIBUTION WITH CUBESAT
Norbert M.K. Lemke, OHB System AG - Munich, Germany

B4.3. Small Satellite Operations

October 2 2018, 14:45 — ZARM 2

Co-Chair(s): *Andreas Hornig , University of Stuttgart, Germany; Peter M. Allan , STFC, United Kingdom;*
Rapporteur(s): *Norbert Lemke, OHB System AG, Germany;*

IAC-18.B4.3.1
BEESAT-3 COMISSIONING - BETTER LATE THAN NEVER
Merlin F. Barschke, Technische Universität Berlin, Germany

IAC-18.B4.3.2
OPERATIONAL EXPERIENCE OF THE TRANSITION FROM INITIAL TO NOMINAL OPERATIONS OF THE UNIVERSITY SMALL SATELLITE "FLYING LAPTOP"
Jonas Keim, IRS, University of Stuttgart, Germany

IAC-18.B4.3.3
PEGASUS – A REVIEW OF IN-ORBIT OPERATION AND OBTAINED RESULTS
Carsten Scharlemann, University of Applied Science Wiener Neustadt, Austria

IAC-18.B4.3.4
ASTERIA OPERATIONS DEMONSTRATES THE VALUE OF COMBINING THE MISSION ASSURANCE AND FAULT PROTECTION ROLES ON CUBESATS
Amanda Donner, Jet Propulsion Laboratory, United States

IAC-18.B4.3.5
ALSAT-NANO: FACILITATING SUCCESS WITH MISSION OPERATIONS.
Ben Taylor, Surrey Space Centre, University of Surrey, United Kingdom

IAC-18.B4.3.7
BUCCANEER RISK MITIGATION MISSION LESSONS LEARNT
Monique Hollick, Defence Science and Technology Group (DST Group), Australia

IAC-18.B4.3.8
THE GROUND SEGMENT API: PROPOSING A UNIFIED INTERFACE FOR THE SPACE OPERATION ECOSYSTEM
Andreas Hornig, University of Stuttgart, Germany

IAC-18.B4.3.9
AN OPEN-SOURCE, PYTHON-POWERED WEB FRAMEWORK TO SUPPORT SMALL SATELLITE MISSION OPERATIONS
Artur Scholz, National Cheng Kung University, Germany

IAC-18.B4.3.10
LASER COMMUNICATION CROSSLINKS FOR SATELLITE AUTONOMOUS NAVIGATION
Pratik Dave, Massachusetts Institute of Technology (MIT), United States

IAC-18.B4.3.11
A SELF-ADAPTIVE DATA HANDLING SYSTEM FOR SMALL SATELLITES AND ITS IMPACT ON FUTURE SATELLITE OPERATIONS
Marcel Kaufmann, Polytechnique Montreal, Canada

IAC-18.B4.3.12
MISSION PLANNING FOR THE TIM NANOSATELLITE REMOTE SENSING CONSTELLATION
Alexander Kleinschrodt, University Wuerzburg, Germany

IAC-18.B4.3.13
PREPARING SONATE FOR AUTONOMOUS CONTROL THROUGH ASAP
Thomas Rapp, Julius Maximilians Universität Würzburg, Germany

IAC-18.B4.3.14
IN-SPACE SERVICES USING REVOLUTIONARY SMALL SATELLITE DESIGN
Arnon Spitzer, Effective Space Solutions, Israel

B4.4. Small Earth Observation Missions

October 3 2018, 09:45 — ZARM 2

Co-Chair(s): *Carsten Tobehn , European Space Agency (ESA), The Netherlands; Larry Paxton , The Johns Hopkins University Applied Physics Laboratory, United States;*
Rapporteur(s): *Marco Gomez Jenkins , Costa Rica Institute of Technology (ITCR), Costa Rica; Werner R. Balogh , World Meteorological Organization (WMO), Switzerland;*

IAC-18.B4.4.1
MAKING THE INVISIBLE VISIBLE: PRECISION RF-EMITTER GEOLOCATION FROM SPACE BY THE HAWKEYE 360 PATHFINDER MISSION
Karan Sarda, Space Flight Laboratory, University of Toronto, Canada

IAC-18.B4.4.2
MICROSATELLITES FOR MARITIME SURVEILLANCE, AN UPDATE ON THE NORWEGIAN SMALLSAT PROGRAM
Jon Harr, Norwegian Space Centre, Norway

IAC-18.B4.4.3
ON-ORBIT VIDEO FROM CARBONITE-2: TOWARDS SOFTWARE-DEFINED EARTH OBSERVATION
Clyde Wheeler, Surrey Satellite Technology Ltd (SSTL), United Kingdom

IAC-18.B4.4.4
1M GSD IMAGING AND VIDEO DEMONSTRATION ON A 65KG MICROSATELLITE
Nobutada Sako, , Japan

IAC-18.B4.4.5
SMALL SATELLITE TO MONITOR THE RED TIDE BLOOMING ON CENTRAL AMERICAN COAST USING A HIGH DEFINITION CAMERA AND TWO MULTISPECTRAL CAMERAS
Mariela Rojas Quesada, Universidad de Costa Rica, Costa Rica

IAC-18.B4.4.6
CHIRAD-SAT: CONCORDIA HYPERSPECTRAL IMAGER AND RADIATION-TOLERANT SATELLITE
Zaid Rana, Concordia University, Canada

IAC-18.B4.4.7
HYPERSCOUT : AN IN-ORBIT DEMONSTRATION OF A MINIATURISED HYPERSPECTRAL INSTRUMENT WITH ONBOARD HIGH-LEVEL DATA PROCESSING
Chris van Dijk, Cosine Research BV, The Netherlands
IAC-18.B4.4.8
ON-ORBIT GREENHOUSE GAS DETECTION WITH THE GHGSAT CONSTELLATION
Laura Bradbury, UTIAS Space Flight Laboratory, Canada

IAC-18.B4.4.9
A COMPACT C-BAND CP-SAR MICROSATELLITE ANTENNA FOR EARTH OBSERVATION
Katia Urata, Chiba University, Japan

IAC-18.B4.4.10
HIGH WIND RETRIEVAL IN HURRICANES USING CYGNSS MEASUREMENTS
Rajeswari Balasubramaniam, University of Michigan, Ann Arbor, United States

IAC-18.B4.4.11
PYRSAT – PREVENTION AND RESPONSE TO WILD FIRES WITH AN INTELLIGENT EARTH OBSERVATION CUBESAT
Mónica Estébanez Camarena, University of Cape Town, South Africa

IAC-18.B4.4.12
DEVELOPING NATIONAL EARTH OBSERVATION CAPABILITIES FOR AUSTRALIA WITH SMALL SATELLITES
Kimberley Clayfield, CSIRO, Australia

B4.5. Access to Space for Small Satellite Missions

October 3 2018, 14:45 — ZARM 2

Co-Chair(s): *Alex da Silva Curiel , Surrey Satellite Technology Ltd (SSTL), United Kingdom; Philip Davies , Deimos Space UK Ltd, United Kingdom;*
Rapporteur(s): *Jeffery Emdee , The Aerospace Corporation, United States;*

IAC-18.B4.5.1
KEYNOTE: ROCKET LAB: LIBERATING THE SMALL SATELLITE MARKET
Peter Beck, Rocket Lab, United States

IAC-18.B4.5.2
LAUNCH RESULTS AND DEVELOPMENTS OF SMALLEST-CLASS LAUNCH SYSTEM 'SS-520 NO.5' ROCKET FOR MICRO-SATELLITE IN JAPAN
Hirohito Ohtsuka, IHI Aerospace Co, Ltd., Japan

IAC-18.B4.5.3
FINDING THE RIGHT ACCESS TO SPACE FOR A DIVERSIFIED SMALL SATELLITE DEMAND
Maxime PUTEAUX, Euroconsult, France

IAC-18.B4.5.4
EUROPEAN ACCESS TO SPACE: BUSINESS AND POLICY PERSPECTIVES ON MICRO LAUNCHERS
Matteo Tugnoli, European Space Policy Institute (ESPI), Austria

IAC-18.B4.5.5
THE LOW-COST, LIGHT SATELLITE LAUNCH OPPORTUNITIES (L3) INITIATIVE
Julio Aprea, European Space Agency (ESA), France

IAC-18.B4.5.6
SMALL UK LAUNCHER MARKET POTENTIAL
Alan Webb, Commercial Space Technologies Ltd., United Kingdom

IAC-18.B4.5.7
PAYLOAD ACCOMMODATION SCHEMES IN PSLV
VENKATASAMY SANTHANA GOPAL, Vikram Sarabhai Space Centre, ISRO, Thiruvananthapuram, India

IAC-18.B4.5.8
ACCOMMODATIONS FOR SECONDARY PAYLOADS IN NASA'S SPACE LAUNCH SYSTEM
Kimberly Robinson, National Aeronautics and Space Administration (NASA), Marshall Space Flight Center, United States

IAC-18.B4.5.9 (non-confirmed)
LAUNCH OF THE ORBITAL EXPRESS VEHICLE FROM THE NORTH COAST OF SCOTLAND
Philip Davies, Deimos Space UK Ltd, United Kingdom

IAC-18.B4.5.10
ARION 2: THE EUROPEAN AND REUSABLE ROCKET LAUNCHER FOR SMALL SATELLITES
Raul Torres, PLD Space, Spain

IAC-18.B4.5.11
A GAME OF RISK; NAVIGATING LAUNCH AS A SECONDARY PAYLOAD
Jenny Barna, Spire Global, Inc., United States

IAC-18.B4.5.12
VENUS - A SMART, VERSATILE AND GREEN SOLUTION PROVIDING SPACE ACCESS AND ORBITAL TRANSFER CAPABILITY TO SMALL PAYLOADS
Andrea Tromba, BERTIN Technologies, France

IAC-18.B4.5.13
LUNAR SUPPORT SERVICES – ENABLING NEW MISSION OPPORTUNITIES FOR SMALL SATELLITES
Christopher Saunders, SSTL, United Kingdom

IAC-18.B4.5.14
UPDATING THE CUBESAT STANDARD TO KEEP PACE WITH A GROWING INDUSTRY
Alicia Johnstone, California Polytechnic State University, United States

IAC-18.B4.5.15 (non-confirmed)
LESS IS MORE: THE EMERGENCE OF NANOTECHNOLOGY, CUBESATS AND SMALL LAUNCH VEHICLES
Elizabeth Esther, NASA, United States

B4.5A-C4.8. Joint Session between IAA and IAF for Small Satellite Propulsion Systems

October 5 2018, 13:30 — ZARM 5

Co-Chair(s): *Arnau Pons Lorente , Purdue University, United States; Jeffery Emdee , The Aerospace Corporation, United States;*
Rapporteur(s): *Elena Toson , , Italy; Elizabeth Jens , Jet Propulsion Laboratory - California Institute of Technology, United States;*

IAC-18. B4.5A-C4.8.1 (non-confirmed)
KEYNOTE: CHALLENGES AND OPPORTUNITIES IN SPACE PROPULSION FOR SMALL SATELLITES
Paulo Lozano, MIT, United States

IAC-18.B4.5A-C4.8.2
MAGNETIC ENHANCED PLASMA PROPULSION SYSTEM FOR SMALL-SATELLITES IOD DEVELOPMENT
Marco Manente, , Italy

IAC-18.B4.5A-C4.8.3
FLIGHT MODEL DEVELOPMENT OF THE WATER RESISTOJET PROPULSION SYSTEM FOR DEEP SPACE EXPLORATION BY THE CUBESAT: EQUULEUS
Jun Asakawa, University of Tokyo, Japan

IAC-18.B4.5A-C4.8.4
HYBRID ATTITUDE AND ORBIT CONTROL OF A PICO-SATELLITE USING MAGNETIC TORQUERS AND AN ELECTRIC PROPULSION SYSTEM
Philip Bangert, University Wuerzburg, Germany

IAC-18.B4.5A-C4.8.5
ADVANCED MICRO-PROPULSION BASED ON THE MICRO-CATHODE ARC THRUSTER
Jonathan Kolbeck, George Washington University, United States

IAC-18.B4.5A-C4.8.6
IN-ORBIT MICRO-PROPULSION DEMONSTRATOR FOR PICO-SATELLITE APPLICATIONS
Vidhya Pallichadath, Delft Institute Of Technology (TU Delft), The Netherlands

IAC-18.B4.5A-C4.8.7
DESIGN OF A TEST PLATFORM FOR MINIATURIZED ELECTRIC PROPULSION SYSTEMS
Fabrizio Stesina, Politecnico di Torino, Italy

IAC-18.B4.5A-C4.8.8
NPT30 - A STAND-ALONE ELECTRIC PROPULSION SYSTEM FOR SMALL SATELLITES
Ane Aanesland, ThrustMe, France

IAC-18.B4.5A-C4.8.10
DEVELOPMENT OF A RADIO-FREQUENCY RESONANT-SWITCH POWER SUPPLY FOR RF ION THRUSTERS FOR SMALL SATELLITES
Iana Kharlan, , Russian Federation

IAC-18.B4.5A-C4.8.11
VLM SYSTEM DEVELOPMENT FOR MICRO SATELLITE APPLICATION
Ravi Ranjan, National University of Singapore, Singapore, Republic of

IAC-18.B4.5A-C4.8.12
SMALL SATELLITE LOW COST PROPULSION SYSTEM USING COTS COMPONENTS
Ben Risi, Space Flight Laboratory, University of Toronto, Canada

IAC-18.B4.5A-C4.8.13
CASELESS THROTTLEABLE SOLID MOTOR FOR SMALL SPACECRAFT
Mykhailo Yemets, Oles Honchar Dnipropetrovsk National University, Ukraine

B4.6A. Generic Technologies for Small/Micro Platforms

October 4 2018, 09:45 — ZARM 2

Co-Chair(s): *Joost Elstak , Airbus Defence and Space Netherlands, The Netherlands; Philip Davies , Deimos Space UK Ltd, United Kingdom;*
Rapporteur(s): *Jian Guo , Delft University of Technology (TU Delft), The Netherlands; Thomas Terzibaschian , DLR, German Aerospace Center, Germany;*

IAC-18.B4.6A.1
IN-ORBIT ASSEMBLY OF LARGE SPACECRAFT USING SMALL SPACECRAFT AND INNOVATIVE TECHNOLOGIES
Steve Eckersley, Surrey Satellite Technology Ltd (SSTL), United Kingdom

IAC-18.B4.6A.2
TIANTUO-3: A HETEROGENEOUS MICRO-NANO SATELLITES CLUSTER
Xiaozhou Zhu, National Innovation Institute of Defense Technology, Chinese Academy of Military Science, China

IAC-18.B4.6A.3
STAVROUDIS-LIKE BAFFLES FOR SMALL SATELLITE IMAGING SYSTEMS
Israel Vaughn, Australian Defence Force Academy (ADFA), Australia

IAC-18.B4.6A.4
INITIAL ORBIT RESULTS FROM THE TUBIX20 PLATFORM
Merlin F. Barschke, Technische Universität Berlin, Germany

IAC-18.B4.6A.5
SCALING EFFECTS IN MINIATURIZATION OF REACTION SPHERES
Linyu Zhu, Delft University of Technology (TU Delft), The Netherlands, The Netherlands

IAC-18.B4.6A.6
ENABLING TECHNOLOGIES AND PROCESSES FOR SPACE MISSIONS - THE S2TEP PLATFORM
Frank Dannemann, German Aerospace Center (DLR), Germany

IAC-18.B4.6A.7
PICO STAR TRACKER WITH HIGH ACCURACY AND HIGH DYNAMIC PERFORMANCE APPLIED FOR COMMERCIAL REMOTE SENSING SATELLITES
Ting Sun, Tsinghua University, China

IAC-18.B4.6A.8
SCOSA - SCALABLE ON-BOARD COMPUTING FOR SPACE AVIONICS
Carl Treudler, German Aerospace Center (DLR), Germany

IAC-18.B4.6A.9
MICRO-SATELLITES DEPLOYABLE STRUCTURES:\\THE CASE OF THE ICEYE SPACECRAFT
Emilio Lozano, ICEYE Oy, Finland

IAC-18.B4.6A.10
PRECISE POINT POSITIONING PAYLOAD FOR ENHANCED NAVIGATION MICROSATELLITE IN LOW ORBIT
Guohua Kang, Nanjing University of Aeronautics and Astronautics, China

IAC-18.B4.6A.11
DEVELOPMENT OF A HIGH-PERFORMANCE LOW-COST PPU FOR AN ELECTROSPRAY COLLOID ELECTRIC PROPULSION SYSTEM FOR SMALL SATELLITE APPLICATIONS
Frank Stelwagen, Systematic, The Netherlands

IAC-18.B4.6A.12
IRAS: LOW-COST CONSTELLATION SATELLITE DESIGN, ELECTRIC PROPULSION AND CONCURRENT ENGINEERING
Manfred Ehresmann, Institute of Space Systems, Universität Stuttgart, Germany

B4.6B. Generic Technologies for Nano/Pico Platforms

October 4 2018, 14:45 — ZARM 2

Chairman(s): *Andy Vick , RAL Space, United Kingdom;*
Co-Chair(s): Zeger de Groot , Innovative Solutions in Space BV, The Netherlands;
Rapporteur(s): *Eugene D Kim , Satrec Initiative, Korea, Republic of; Martin Buscher , Technische Universität Berlin, Germany;*

IAC-18.B4.6B.2
HIGH-PRECISION SPEED MEASUREMENT BASED ON LINEAR HALL EFFECT SENSORS OF REACTION WHEEL FOR PICO-NANO SATELLITES
Guanghui Liu, Northwestern Polytechnical University, China

IAC-18.B4.6B.3
FLIGHT RESULTS OF THE MISSION OF TNS-0 #2 NANOSATELLITE CONNECTED VIA GLOBAL COMMUNICATION SYSTEM
Mikhail Ovchinnikov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-18.B4.6B.4
THE REDUNDANCY AND FAIL-SAFE CONCEPT OF THE OPS-SAT PAYLOAD PROCESSING PLATFORM
Reinhard Zeif, Graz University of Technology (TU Graz), Austria

IAC-18.B4.6B.5
DELFI-PQ: THE FIRST POCKETQUBE OF DELFT UNIVERSITY OF TECHNOLOGY
Silvana Radu, Delft University of Technology (TU Delft), The Netherlands

IAC-18.B4.6B.6
THE STATUS OF CUBESAT ELECTRIC PROPULSION TECHNOLOGY
Peijie Zhu, Shaanxi Engineering Laboratory for Microsatellites, Northwestern Polytechnical University, China

IAC-18.B4.6B.7
DESIGN, DEVELOPMENT, TESTING AND ON-ORBIT PERFORMANCE RESULTS OF A LOW-COST STORE-AND-FORWARD PAYLOAD ONBOARD A 1U CUBESAT CONSTELLATION FOR REMOTE DATA COLLECTION APPLICATIONS
Adrian Salces, Laboratory of Spacecraft Environment Interaction Engineering , Kyushu Institute of Technology, Japan

IAC-18.B4.6B.8
A COMPACT THERMO-OPTICAL SUN AND EARTH SENSOR FOR SMALL SATELLITES
Martin Dziura, Technical University of Munich, Germany

IAC-18.B4.6B.9
INTERSATELITAL COMMUNICATION BETWEEN THE CUBESAT "AZTECHSAT-1" AND THE GLOBALSTAR CONSTELLATION
Hector Simon Vargas Martinez, Universidad Popular Autónoma del Estado de Puebla, Mexico

IAC-18.B4.6B.10
OPPORTUNITIES AND TECHNICAL CHALLENGES OFFERED BY A LED-BASED TECHNOLOGY ON-BOARD A CUBESAT: THE LEDSAT MISSION
Paolo Marzioli, Sapienza University of Rome, Italy

IAC-18.B4.6B.11
ATTITUDE AND ORBIT CONTROL RESULTS OF THE GOMX-4 TANDEM CUBESAT MISSION
Rasmus Holst, GomSpace Aps, Denmark

IAC-18.B4.6B.12
ITERATIVE DESIGN AND EXPERIMENTAL SIMULATION ANALYSIS OF LOUVER FOR NANOSATELLITES
Tanveer Ahmed, R.V.College of Engineering, India

IAC-18.B4.6B.13
DESIGN AND ANALYSIS OF AN INNOVATIVE CUBESAT THERMAL CONTROL SYSTEM FOR BIOLOGICAL EXPERIMENT IN LUNAR ENVIRONMENT
Christian Conigliaro, Politecnico di Torino, Italy

IAC-18.B4.6B.14
BEESAT-5: A NEW LEVEL OF SATELLITE MINIATURIZATION AND INTEGRATION
Frank Baumann, Technische Universität Berlin, Germany

B4.7. Highly Integrated Distributed Systems

October 5 2018, 13:30 — ZARM 2

Co-Chair(s): *Michele Grassi , University of Naples "Federico II", Italy; Rainer Sandau , International Academy of Astronautics (IAA), Germany;*
Rapporteur(s): *Jaime Esper , National Aeronautics and Space Administration (NASA), United States; Marco D'Errico , Seconda Universita' di Napoli, Italy;*

IAC-18.B4.7.1
DATACUBE SERVICES ON A SATELLITE: THE ORBIDANSE PROJECT
Peter Baumann, Jacobs University Bremen, Germany

IAC-18.B4.7.2
ACHIEVING CONSENSUS IN DISTRIBUTED SOFTWARE ARCHITECTURES FOR SATELLITE MISSIONS
Johan Carvajal-Godinez, Delft University of Technology (TU Delft), The Netherlands

IAC-18.B4.7.3
A MODULAR HARDWARE DIAGNOSIS FRAMEWORK FOR SMALL SPACECRAFT
Mario Starke, Technische Universität Berlin, Germany

IAC-18.B4.7.4
ONTOLOGY BASED SELF-SYNTHESIS METHOD OF TASK CONFIGURATION FOR SATELLITE CLUSTER
Xuexuan Zhao, Tsinghua University, China

IAC-18.B4.7.5
CONSTELLATION OF CUBESAT FOR WIRELESS TRANSMISSION OF SPACE BASED SOLAR POWER
Chaitnya Chopra, University of Petroleum and Energy Studies, India

IAC-18.B4.7.6
DEPLOYMENT AND MAINTENANCE OF NANOSATELLITE TETRAHEDRAL FORMATION FLYING USING AERODYNAMIC FORCES
Danil Ivanov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-18.B4.7.7
FLOCKING IN MICRO-NANO SATELLITE INTELLIGENT CLUSTER SYSTEM WITH COLLABORATIVE AND AUTONOMIC CONTROL
Binglei SUN, Shanghai Institute of Spaceflight Control Technology, China

IAC-18.B4.7.8
CLOCK SYNCHRONIZATION ONBOARD A CONSTELLATION OF SMALL EARTH OBSERVING LEO SATELLITES
Aimal Siraj, void inc., Japan

IAC-18.B4.7.9
LUNAR NAVIGATION AND POSITIONING SYSTEM BASED ON CUBESAT CONSTELLATION
Karim Hacene Lhadj, Politecnico di Torino, Italy

IAC-18.B4.7.10
GLOBAL MISSION FOR 3D IONOSPHERE MAPPING VIA CUBESAT CONSTELLATION
Kateryna Aheieva, Laboratory of Spacecraft Environment Interaction Engineering , Kyushu Institute of Technology, Japan

IAC-18.B4.7.11
SMALL SATELLITE FORMATION FLYING FOR DISTRIBUTED SYNTHETIC APERTURE RADAR
Giancarmine Fasano, University of Naples "Federico II", Italy

IAC-18.B4.7.12
HOW TO BUILD A SATELLITE IN A WEEK – THE ROAD TOWARDS SATELLITE MASS MANUFACTURING
Tom Segert, Berlin Space Technologies GmbH, Germany

B4.8. Small Spacecraft for Deep-Space Exploration

October 5 2018, 09:45 — ZARM 2

Co-Chair(s): *Leon Alkalai , National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States; Rene Laufer , Baylor University / University of Cape Town, United States;*
Rapporteur(s): *Amanda Stiles , Rocket Lab, United States;*

IAC-18.B4.8.1
ARGOMOON: CHALLENGES AND DESIGN SOLUTIONS FOR THE DEVELOPMENT OF A DEEP SPACE SMALL SATELLITE
Valerio Di Tana, Argotec, Italy

IAC-18.B4.8.2
MISSION DESIGN OF THE EQUULEUS AND OMOTENASHI CUBESATS
Stefano Campagnola, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States

IAC-18.B4.8.4
LUNAR FLASHLIGHT CUBESAT GNC SYSTEM DEVELOPMENT FOR LUNAR EXPLORATION
Peter Lai, NASA Jet Propulsion Laboratory, United States

IAC-18.B4.8.5
SYSTEM DESIGN OF LUMIO: A CUBESAT AT EARTH-MOON L2 FOR OBSERVING LUNAR METEOROID IMPACTS
Prem Sundaramoorthy, Delft University of Technology (TU Delft), The Netherlands

IAC-18.B4.8.6
LUNAR EXPLORATION ORBITER PROGRAM
Payal Nandi, Team Indus, Axiom Research Labs Pvt. Ltd., India

IAC-18.B4.8.7
FUTURE LOW-COST LUNAR AND PLANETARY MISSIONS ENABLED BY COMMERCIAL SPACE COMPANIES
Alain Berinstain, Moon Express Inc., United States

IAC-18.B4.8.8
GEOPHYSICAL RECONNAISSANCE ASTEROID SURFACE PROBE
Kieran Carroll, Gedex Inc., Canada

IAC-18.B4.8.9
WHAT'S INSIDE A RUBBLE PILE ASTEROID? DISCUS - A TOMOGRAPHIC TWIN RADAR CUBESAT TO FIND OUT.
Patrick Bambach, Max-Planck Institute for Solar Systems Research,, Germany

IAC-18.B4.8.10
CUBESAT 3U-PAYLOAD FOR IN-SITU RESOURCE UTILISATION DEMONSTRATION AT C-TYPE NEAR EARTH ASTEROIDS
Elioenai Sitepu, Cranfield University, United Kingdom

IAC-18.B4.8.11
MODELING OF ORBITAL AND ATTITUDE DYNAMICS OF NANOSATELLITES CONTROLLED VIA ACTIVE ELECTROSTATIC CHARGING
Filippo Corradino, Politecnico di Torino, Italy

IAC-18.B4.8.12
AN AUTONOMOUS OPTICAL NAVIGATION FILTER FOR A CUBESAT MISSION TO A BINARY ASTEROID SYSTEM
Dario Modenini, University of Bologna, Italy

IAC-18.B4.8.15
FUEL-FREE ANGULAR MOMENTUM UNLOADING USING THE INTERPLANETARY MAGNETIC FIELD IN SMALL-SIZED SPACECRAFT
Pachara Phlaengsorn, Nagoya University, Japan

IAC-18.B4.8.16
A MINIMAL CHIPSAT INTERSTELLAR MISSION: TECHNOLOGY AND MISSION ARCHITECTURE
Wenjing Hu, International Space University (ISU), France

B4.9-GTS.5. Small Satellite Missions Global Technical Session

October 5 2018, 13:30 — ÖVB 4

Co-Chair(s): *Matthias Hetscher , DLR (German Aerospace Center), Germany; Norbert Lemke , OHB System AG, Germany;*
Rapporteur(s): *Alex da Silva Curiel , Surrey Satellite Technology Ltd (SSTL), United Kingdom;*

IAC-18.B4.9-GTS.5.1
KEYNOTE: PRACTICAL DEBRIS MITIGATION MANUAL FOR DEVELOPERS OF MICROSATELLITES AND SMALLER
Darren McKnight, Integrity Applications Incorporated (IAI), United States

IAC-18.B4.9-GTS.5.2
THE FIRST SATELLITE ASSEMBLY, INTEGRATION AND TEST FACILITY (AIT) IN THAILAND
LIKHIT WARANON, Geo-Informatics and Space Technology Development Agency (Public Organization), Thailand

IAC-18.B4.9-GTS.5.3
SETEC Lab's Small Satellite Program for Environmental Monitoring Marco Gomez Jenkins, Costa Rica Institute of Technology (ITCR), Costa Rica

IAC-18.B4.9-GTS.5.4
GALAMSAT2: FIRST GHANA SATELLITE TO MONITOR ILLEGAL MINING ACTIVITIES
Benjamin Bonsu, All Nations University, Ghana

IAC-18.B4.9-GTS.5.5
OHB SMALL SATELLITES
Norbert M.K. Lemke, OHB System AG - Munich, Germany

IAC-18.B4.9-GTS.5.6
OPERATIONAL EXPERIENCE WITH A NANOSATELLITE SCIENCE MISSION
Otto Koudelka, Graz University of Technology (TU Graz), Austria

IAC-18.B4.9-GTS.5.7
EIRSAT-1: THE EDUCATIONAL IRISH RESEARCH SATELLITE
David Murphy, University College Dublin (UCD), Ireland

IAC-18.B4.9-GTS.5.8
THE IN-ORBIT DEMONSTRATION PROGRAMME, MISSION 1 - ACCELERATING THE DEMONSTRATION OF COMMERCIAL WEATHER DATA USING SMALL SATELLITES
Graeme Taylor, Satellite Applications Catapult, United Kingdom

IAC-18.B4.9-GTS.5.9 (non-confirmed)
APPLYING A RAPID DEVELOPMENT APPROACH TO SATELLITE DEVELOPMENT ENABLING CUSTOMERS TO MEET THEIR MARKET REQUIREMENTS
Libby Hoban, Clyde Space Ltd., United Kingdom

IAC-18.B4.9-GTS.5.10
COMPARATIVE STUDY OF CLASSICAL AND FUZZY PID ATTITUDE CONTROL SYSTEM WITH EXTENDED KALMAN FILTER FEEDBACK FOR NANOSATELLITES.
Prerna Baranwal, Birla Institute of Technology and Science(BITS), India

IAC-18.B4.9-GTS.5.11
PLATINO PROJECT: A NEW ITALIAN MULTI-APPLICATION SMALL SATELLITE PLATFORM FOR HIGHLY COMPETITIVE MISSIONS.
Vincenzo Stanzione, Sitael Spa, Italy

IAC-18.B4.9-GTS.5.12
NASA'S SMALL SPACECRAFT SYSTEMS VIRTUAL INSTITUTE AND SMALL SPACECRAFT ENTERPRISE
Bruce Yost, NASA, United States

B5. IAF SYMPOSIUM ON INTEGRATED APPLICATIONS

Coordinator(s): *Larry Paxton , The Johns Hopkins University Applied Physics Laboratory, United States; Roberta Mugellesi-Dow , European Space Agency (ESA), United Kingdom;*

B5.1. Tools and Technology in Support of Integrated Applications

October 1 2018, 15:00 — Bremen 3

Co-Chair(s): *Boris Penne , OHB System AG, Germany; Larry Paxton, The Johns Hopkins University Applied Physics Laboratory, United States; Roberta Mugellesi-Dow , European Space Agency (ESA), United Kingdom;*
Rapporteur(s): *Beatrice Barresi , ESA, United Kingdom;*

IAC-18.B5.1.2
STRATOSPHERIC BALLOONS – LOW-COST PLATFORMS FOR SCIENCE, EARTH OBSERVATION, SATELLITE DATA VALIDATION AND PREPARATION OF NEW SPACE MISSIONS
Kristine Dannenberg, Swedish National Space Board (SNSB), Sweden

IAC-18.B5.1.3
SWIM IN SPACE WITH COMRADES IN THE AIR
Frank Morlang, DLR (German Aerospace Center), Germany

IAC-18.B5.1.4
SPACE BUSINESS APPLICATIONS FOR THE NEEDS OF CIVIL SOCIETY: AN OVERVIEW OF AP-IT ACTIVITIES WITHIN THE ARTES BUSINESS APPLICATIONS AND C&G PROGRAMMES
Eleonora Lombardi, Research Consortium Hypatia, Italy

IAC-18.B5.1.5
THEMATIC MONITORING OF CHANGES IN THE STATE OF OBJECTS ON THE EARTH'S SURFACE
Larysa Areshkina, , Belarus

IAC-18.B5.1.6
A HYBRID EMBEDDED DEVELOPING AND DEBUGGING SYSTEM FOR HIGH-PRECISION SATELLITE NAVIGATION TERMINAL DESIGN
Ling Jiang, Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences (CIGIT), China

IAC-18.B5.1.7
PLANCK ADDED VALUE INTERFACES
Stratos Gerakakis, Planetek Hellas epe, Greece

IAC-18.B5.1.8
THE RESEARCH ON SYSTEM ARCHITECTURE SUITED TO INTEGRATED PAYLOADS BASED ON OPERATION SYSTEM CONCEPT
Xiaodan Wu, Shanghai Academy of Spaceflight Technology (SAST), China Aerospace and Technology Corporation (CASC), China

IAC-18.B5.1.9
STATE OF THE ART OF EARTH OBSERVATION INSTRUMENTS FOR SMALL SATELLITE MISSIONS
Paweł Czapski, , Poland

IAC-18.B5.1.10
DEVELOPMENT OF GROUND SENSOR TERMINAL FOR STORE & FORWARD MISSION OF NANO-SATELLITE UITMSAT-1
Siti Amalina Binti Enche Ab Rahim, Universiti Teknologi MARA (UITM), Malaysia

IAC-18.B5.1.11
AUGMENTED REALITY FOR THE ENHANCEMENT OF SPACE PRODUCT ASSURANCE AND SAFETY
Raul Alarcon, ESA - European Space Agency, The Netherlands

IAC-18.B5.1.12
DEVELOPMENTS OF THE LASER COMMUNICATION MODULES BETWEEN SMALL-SATELLITE AND MOBILE GROUND STATIONS
Toshiki Nakamura, , Japan

IAC-18.B5.1.13
DEVELOPMENT OF A SINGLE-CHANNEL WILDFIRE DETECTION ALGORITHM FOR THE TUBIN MISSION
Julian Bartholomäus, Technische Universität Berlin, Germany

B5.2. Integrated Applications End-to-End Solutions

October 4 2018, 09:45 — Bremen 3

Co-Chair(s): *Boris Penne , OHB System AG, Germany; Roberta Mugellesi-Dow , European Space Agency (ESA), United Kingdom;*
Rapporteur(s)*: Beatrice Barresi , ESA, United Kingdom; Yuval Brodsky , Newton VR Ltd., Israel;*

IAC-18.B5.2.1
SPACE2030 AND SPACE 4.0: SYNERGIES FOR CAPACITY BUILDING IN THE XXI CENTURY
Stefano Ferretti, European Space Policy Institute (ESPI), Austria

IAC-18.B5.2.2
APPLICATIONS FROM MULTI-LEVEL DATA ACQUISITION PLATFORMS, DEVELOPMENT OF SPACE-BASED SOLUTIONS IN COSTA RICA
Roberto Aguilar, Skolkovo Institute of Science and Technology, Russian Federation

IAC-18.B5.2.3
HOW FARMERS BENEFIT FROM INTEGRATION OF EO, METEOROLOGICAL, POSITIONING AND FIELD DATA IN AN ANALYTICS ENGINE – THE AGRI-GIS EXAMPLE OF S ODISHA, INDIA
Mukund Kadursrinivas Rao, National Institute of Advanced Studies (NIAS), India

IAC-18.B5.2.5
GEOSPATIAL ANALYSIS OF HIGH-RESOLUTION IMAGE DERIVATIVES FOR OPTIMIZING SUSTAINABLE CROP PRODUCTION AND NATURAL RESOURCES MANAGEMENT IN THENI DISTRICT, TAMIL NADU
Manjunath C B, Vikram Sarabhai Space Centre, Trivandrum, India, India

IAC-18.B5.2.6
VESSEL MONITORING IN THE NORTH AND BALTIC SEA CHANNELS BASED ON DUAL-POLARIZATION SAR IMAGES AND AIS DATA
Ramona-Maria Pelich, LuxSpace Sarl, Luxemburg

IAC-18.B5.2.7
K2SPACE: PROVIDING NEW MARKET OPPORTUNITIES TO ADDED VALUE COMPANIES IN THE NEW SPACE ECONOMY ERA
Giorgio Licciardi, Research Consortium Hypatia, Italy

IAC-18.B5.2.8 (non-confirmed)
APPLICATION OF MACHINE LEARNING IN PREDICTING POSSIBILITY OF TRAFFIC CONGESTION IN OWERRI-DOUGLAS ROAD OF IMO STATE, NIGERIA FOR ANY GIVEN TIME OF THE DAY.
Anthony Nwachukwu, , Nigeria

IAC-18.B5.2.9
DEVELOPMENT OF SPACE TECHNOLOGY APPLICATIONS IN PERU
Jimmy Gora, Beihang University (BUAA), China

IAC-18.B5.2.10
A UNIVERSITY-BASED FACILITY FOR EVALUATION AND ASSESSMENT OF SPACE PROJECTS
Alexander Kharlan, Skolkovo Institute of Science and Technology, Russian Federation

IAC-18.B5.2.11
DELIVERING SOLUTIONS AT THE INTERSECTION SATELLITE BIG DATA, CLOUD COMPUTING, MACHINE LEARNING AND IOT TECHNOLOGY - THE CASE OF SATSURE
Prateep Basu, International Space University, India

IAC-18.B5.2.12
SPACE ASSETS, TECHNOLOGY AND SERVICES IN SUPPORT OF MARITIME SECTOR
Angeliki Papadimitriou, European Space Agency (ESA), France

IAC-18.B5.2.13
FIRE-RS SYSTEM - INTEGRATING LAND SENSORS, CUBESAT COMMUNICATIONS, UNMANNED AERIAL VEHICLES AND A SITUATION ASSESSMENT SOFTWARE FOR WILDLAND FIRE CHARACTERIZATION AND MAPPING.
Franco Pérez-Lissi, University of Vigo, Spain

B5.3. Satellite Commercial Applications

October 4 2018, 14:45 — Bremen 3

Co-Chair(s): *Dengyun Yu , China Aerospace Science and Technology Corporation (CASC), China; John M. Horack , The Ohio State University College of Engineering, United States;*
Rapporteur(s): *Samuel Malloy , The Ohio State University, United States;*

IAC-18.B5.3.2
TRANSFERRING RIGHTS OF SATELLITE IMAGERY AND DATA. CURRENT CONTRACT PRACTICE AND NEW CHALLENGES.
Jordi Sandalinas, , Spain

IAC-18.B5.3.4
THE INTEGRATED APPLICATION OF SATELLITE COMMUNICATION IN CIVIL AVIATION AREA VIA SPACE NETWORK
Rong Sun, Beijing Institute of Aerospace Systems Engineering, China Aerospace Science and Technology Corporation (CASC), China

IAC-18.B5.3.5
RESEARCH ON THE APPLICATION AND DEMAND OF MARITIME AFFAIRS UNDER THE PNT SYSTEM BASED ON BEIDOU NAVIGATION SYSTEM
YANG ZHANG, Ministry of Transport, China

IAC-18.B5.3.6
MODERN ASPECTS OF AEROSPACE MONITORING OF GEOTECHNICAL SYSTEMS BASED ON UNMANNED AERIAL VEHICLES
Alchin Shirin-zade, Azerbaijan National Aerospace Agency, Azerbaijan

IAC-18.B5.3.7
IN EMERGING EO NEWSPACE GLOBAL MARKETS - CHALLENGES FOR INDIAN REMOTE SENSING SYSTEMS
Mukund Kadursrinivas Rao, National Institute of Advanced Studies (NIAS), India

IAC-18.B5.3.8
THE TECHNICAL AND COMMERCIAL INCREMENT OF THE FUSION OF BIG DATA ANALYSIS, ARTIFICIAL INTELLIGENCE AND EARTH OBSERVATION
Shan Huang, International Space University(ISU), France

IAC-18.B5.3.9
LEOS-50 PLATFORM EVOLUTION
Björn Danziger, Berlin Space Technologies , Germany

IAC-18.B5.3.10
RSHUB: A WEB-BASED PLATFORM FOR COLLABORATIVE RESEARCH AND INOVATION WITH REMOTE SENSING DATA AND APPLICATION
Wei Wan, China Center for Resources Satellite Date and Application (CRESDA), China

IAC-18.B5.3.11
EXPLORING THREATS AND OPPORTUNITIES THROUGH MEGA TRENDS IN THE SPACE 4.0 ERA
Gianluigi Baldesi, European Space Agency (ESA), France

IAC-18.B5.3.12
SARA – SYNTHETIC APERTURE RADAR CONSTELLATION FOR AFRICA
Sias Mostert, Space Commercial Services Holdings (Pty) Ltd, South Africa

B6. IAF SPACE OPERATIONS SYMPOSIUM

Coordinator(s): *John Auburn , RHEATECH Ltd, United Kingdom; Otfrid Liepack , National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States;*

B6.1. Ground Operations - Systems and Solutions

October 4 2018, 14:45 — CCB Franzius

Co-Chair(s): *Mario Cardano , Thales Alenia Space France, Italy; Michael McKay , European Space Agency (ESA), Germany;*
Rapporteur(s): *Hegyi Akos , Airbus Defence & Space, Germany;*

IAC-18.B6.1.1
FLIGHT DYNAMICS MICROSERVICES
Stefan Hackel, DLR, German Aerospace Center, Germany

IAC-18.B6.1.2
AUTONOMOUS SYSTEMS OF REAL-TIME MONITORING AND SATELLITE MISSION ANALYSIS TOOL
Sittiporn Channumsin, Geo-Informatics and Space Technology Development Agency (Public Organization, Thailand

IAC-18.B6.1.3
ELEMENTS OF MISSION CONTROL SOFTWARE FOR A COMMERCIAL LUNAR LANDING AND SURFACE EXPLORATION MISSION
Chakshu Gupta, Team Indus, Axiom Research Labs Pvt. Ltd., India

IAC-18.B6.1.4
A WEB SERVICES OPEN STANDARD FOR GROUND SEGMENT OPERATIONS AND WHY WE MADE IT
Ed Chester, Catena Space, United Kingdom

IAC-18.B6.1.5 (non-confirmed)
EVOLUTION OF THE ECLIPSE OPERATIONS CONCEPT FOR ESA'S X-RAY OBSERVATORY XMM-NEWTON
Muhammad Shoaib Malik, Telespazio VEGA Deutschland GmbH c/o ESA-ESOC, Germany, Germany

IAC-18.B6.1.6
ADVANCES IN CONTEXT AWARE SPACECRAFT TELEMETRY CHECKING
Chiara Brighenti, , Italy

IAC-18.B6.1.8
MINI-SLR: A FULLY AUTOMATED MINIATURE SATELLITE LASER RANGING GROUND STATION
Daniel Hampf, German Aerospace Center (DLR), Germany

B6.2. New Space Operations Concepts and Advanced Systems

October 5 2018, 09:45 — CCB Bergen

Co-Chair(s): *Pierre Lods , Centre National d'Etudes Spatiales (CNES), France; Thomas Kuch , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Keiichiro Sakagami , Japan Manned Space Systems Corporation (JAMSS), Japan;*

IAC-18.B6.2.1
TOO MANY SATELLITES TO OPERATE? HOW PLANET SUCCESSFULLY OPERATES 100'S OF SATELLITES USING AGILE AEROSPACE
Kattia Flores Pozo, Planet Labs Inc., Germany

IAC-18.B6.2.3
OPERATIONAL PLANNING OF REMOTE SENSING MISSIONS COMBINING SATELLITES AND FLYING ASSETS – OPPORTUNITIES AND CHALLENGES
Daniel Novak, Airbus Defence and Space SAS, France

IAC-18.B6.2.4
MISSION SCHEDULING FOR MULTIPLE SPACECRAFT REFUELING BASED ON SPACE FUEL STATIONS
Biao Xu, Nanjing University of Aeronautics and Astronautics, China

IAC-18.B6.2.5
AUTONOMOUS OPERATIONS FOR SPACEFLIGHT MISSION CONTROL: CHALLENGES AND BENEFITS
Ali Baghchehsara, TU Clausthal, Germany

IAC-18.B6.2.8
AUTOMATING SATELLITE MANEUVER PLANNING AND EXECUTION FOR LEO AND MEO MISSIONS
Alexander Fehr, OHB System AG, Germany

IAC-18.B6.2.9
ELECTRIC PROPULSION IN A TWO TON COMMUNICATIONS SPACECRAFT - OPERATIONAL CHALLENGES
Anuradha Prakasha, Indian Space Research Organization (ISRO), India

IAC-18.B6.2.10
TOWARDS THE UTILIZATION OF OPTICAL GROUND-TO-SPACE LINKS FOR LOW EARTH ORBITING SPACECRAFT
Marcus Knopp, German Aerospace Center (DLR), Germany

IAC-18.B6.2.11
FASTMOPS – PLANNING AND ANALYSIS OF OPERATIONS AND NAVIGATION STRATEGIES IN THE PROXIMITY OPERATIONS FOR AN ASTEROID MISSION
Joao Branco, GMV Aerospace & Defence SAU, Portugal

B6.3. Mission Operations, Validation, Simulation and Training

October 1 2018, 15:00 — CCB Franzius

Co-Chair(s): *Paolo Ferri , European Space Agency (ESA), Germany; Zeina Mounzer , Telespazio VEGA Deutschland GmbH, Germany;*
Rapporteur(s): *Borre Pedersen , Kongsberg Satellite Services AS, Norway;*

IAC-18.B6.3.1
THE LISA PATHFINDER MISSION IN-ORBIT EXPERIENCE AND OUTLOOK FOR LISA
Andreas Rudolph, European Space Agency (ESA), Germany

IAC-18.B6.3.3
FLIGHT RESULTS OF MARCONISSTA - AN RF SPECTRUM ANALYZER ABOARD THE ISS TO IMPROVE FREQUENCY SHARING AND SATELLITE OPERATIONS
Martin Buscher, Technische Universität Berlin, Germany

IAC-18.B6.3.4
WHAT CAN GO WRONG, WILL GO WRONG: THE BUG-OUT PROCEDURES TESTED DURING ICARES-1 ANALOG MARS MISSION AT THE LUNARES HABITAT IN PILA, POLAND
Malgorzata Perycz, Open Science Foundation, Poland

IAC-18.B6.3.5
THE MARS TERRAIN SIMULATOR: AN INDOOR ANALOGUE FACILITY TO VALIDATE AND SIMULATE EXOMARS ROVER OPERATIONS AND TO SUPPORT THE EXOMARS SURFACE MISSION
Maurizio Deffacis, Altec S.p.A., Italy

IAC-18.B6.3.6
CHALLENGES IN THE DEFINITION, VALIDATION AND SIMULATION OF THE GROUND OPERATIONS OF THE EXOMARS 2020 ROVER SURFACE MISSION AT THE ROVER OPERATIONS CONTROL CENTRE (ROCC)
Diego Bussi, Altec S.p.A., Italy

IAC-18.B6.3.7
DANCE: A FRICTIONLESS 5 DOF FACILITY FOR GNC PROXIMITY MANEUVERING EXPERIMENTAL TESTING AND VALIDATION
Pierluigi Visconti, Politecnico di Milano, Italy

IAC-18.B6.3.8
ATENA: AN ADVANCED SOLUTION FOR THE SIMULATION AND VALIDATION OF NANOSATELLITE OPERATIONS
Claudio Galbiati, Argotec, Italy

IAC-18.B6.3.9
SPACE PAYLOAD TEST SYSTEM: A FLEXIBLE SOFTWARE SUITE FOR TMTC MANAGEMENT FROM DEVELOPMENT TO INTEGRATION AND OPERATION MISSION PHASES
Cristoforo Abbattista, Planetek Italia, Italy

IAC-18.B6.3.10
SIMULATION FOR GOAL-BASED MISSION CONTINUATION ON-BOARD INTERPLANETARY SPACECRAFT
Alexandra Wander, Universität der Bundeswehr München, Germany

IAC-18.B6.3.11
IN-FLIGHT CALIBRATION OF NANOSATELLITE'S INERTIA TENSOR: THE ALGORITHM AND REQUIREMENTS FOR ON-BOARD SENSORS
Igor Lomaka, Samara National Research University, Russian Federation

B6.4-B3.4. Flight & Ground Operations of HSF Systems (A Joint Session of the Human Spaceflight and Space Operations Symposia)

October 3 2018, 09:45 — ZARM 4

Co-Chair(s): *Annamaria Piras , Thales Alenia Space Italia, Italy; Dieter Sabath , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Thomas A.E. Andersen , Danish Aerospace Company ApS, Denmark;*

IAC-18.B6.4-B3.4.2
COLUMBUS OPERATION AS BASIS FOR FUTURE EXPLORATION
Gerd Söllner, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.B6.4-B3.4-B.3
HORIZONS MISSION – CHALLENGES AND HIGHLIGHTS
Jan Marius Bach, DLR (German Aerospace Center), Germany

IAC-18.B6.4-B3.4.4
COMMERCIALIZATION IN COLUMBUS: LOOKING BEFORE LEAPING
Nadia This, GMV-Insyen for German Space Operations Center (DLR/GSOC), Germany

IAC-18.B6.4-B3.4.5
ALTEC EUROPEAN LOGISTICS CENTER SUPPORTING COLUMBUS OPERATIONS
Rosa Sapone, Altec S.p.A., Italy

IAC-18.B6.4-B3.4.6 (non-confirmed)
UTILIZATION OF THE INTERNATIONAL SPACE STATION FOR CREW AUTONOMOUS SCHEDULING TEST (CAST)
Matthew Healy, United Space Alliance, United States

IAC-18.B6.4-B3.4.7
NEW EXTERNAL PAYLOAD PLATFORM BARTOLOMEO ON THE INTERNATIONAL SPACE STATION
Christian Steimle, Airbus Defence and Space, Germany

IAC-18.B6.4-B3.4.8
PAYLOAD OPERATIONS CENTER - LESSONS FROM COMMERCIAL ENGAGEMENT
Bobby Watkins, NASA, United States

IAC-18.B6.4-B3.4.9
CADMOS, THE FRENCH USOC: AN OUTLOOK ON NEW PROSPECTS AFTER A QUARTER CENTURY HISTORY.
Mauro Augelli, Centre National d'Etudes Spatiales (CNES), France

IAC-18.B6.4-B3.4.10
HIGH RATE DATA BROKER FOR FSL OPERATIONS
Michel Kruglanski, Belgian Institute for Space Aeronomy (BISA), Belgium

IAC-18.B6.4-B3.4.11
A COST EFFECTIVE METHODOLOGY FOR BUILDING FLIGHT SPARES FOR ROBOTIC LIFE EXTENSION ON THE INTERNATIONAL SPACE STATION
Vivian Truong, MDA Corporation, Canada

IAC-18.B6.4-B3.4.12
SAFEGUARDING FOR CONTINGENCY DEORBIT CAPABILITY AFTER AN ISS DEPRESSURIZATION FAILURE
Ulhas Kamath, Boeing, United States

C1. IAF ASTRODYNAMICS SYMPOSIUM

Coordinator(s): Alfred Ng , Canadian Space Agency, Canada; Anna Guerman , Centre for Mechanical and Aerospace Science and Technologies (C-MAST), Portugal;

C1.1. Orbital Dynamics (1)

October 1 2018, 15:00 — CCB Borgward

Co-Chair(s): *Antonio Prado , National Institute for Space Research - INPE , Brazil; Gerard Gomez , University of Barcelona, Spain;*
Rapporteur(s): *Laureano Cangahuala , Jet Propulsion Laboratory, United States;*

IAC-18.C1.1.1
HIGHER ORDER ANALYTICAL SOLUTION TO THE DISTANT RETROGRADE ORBITS PROBLEM
Martin Lara, , Spain

IAC-18.C1.1.2
HYBRID SGP4 PROPAGATOR BASED ON MACHINE-LEARNING TECHNIQUES APPLIED TO GALILEO-TYPE ORBITS
Juan Félix San-Juan, Universidad de La Rioja, Spain

IAC-18.C1.1.3
HIGH ACCURACY ORBIT DETERMINATION OF GEO-STATIONARY SATELLITES USING DIFFERENTIAL ALGEBRA AND HIGH-ORDER EXTENDED KALMAN FILTER
Jianlin Chen, National Key Laboratory of Aerospace Flight Dynamics,Northwestern Polytechnical University, China

IAC-18.C1.1.4
ANALYTICAL AND SEMI-ANALYTICAL APPROACHES TO THE THIRD-BODY PERTURBATION IN NEARLY CO-ORBITAL REGIMES
Rita Neves, Cranfield University, United Kingdom

IAC-18.C1.1.7
EFFICIENT TWO-BODY APPROXIMATIONS OF IMPULSIVE TRANSFERS BETWEEN HALO ORBITS
Elena Fantino, Khalifa University of Science and Technology (KUST), United Arab Emirates

IAC-18.C1.1.8
IDENTIFYING HETEROCLINIC TRANSFERS USING ARTIFICIAL NEURAL NETWORKS
Stijn De Smet, University of Colorado Boulder, United States

IAC-18.C1.1.9
EXTENDED STATE SPACE APPROACH FOR TRAJECTORY DESIGN IN ELLIPTIC RESTRICTED THREE-BODY PROBLEM
Yuki Akiyama, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.C1.1.10
DYNAMICS OF CAPTURE ORBITS FROM LIBRATION REGION ANALYSIS
Stefano Carletta, Sapienza University of Rome, Italy

IAC-18.C1.1.11
PHASING AND RENDEZVOUS OPERATIONS ON NON-KEPLERIAN ORBITS IN THE EARTH-MOON SYSTEM
Lorenzo Bucci, Politecnico di Milano, Italy

IAC-18.C1.1.12
NEUTRAL ATMOSPHERE DRAG AT THE ALTITUDE OF LARES AND AJISAI
Carmen Pardini, ISTI-CNR, Italy

IAC-18.C1.1.13
ANALYTICAL SOLUTION OF LOW-THRUST MINIMUM ENERGY COPLANAR ORBIT TRANSFER BY USING TIME-AVERAGED CANONICAL EQUATIONS
Kenji Kitamura, Mitsubishi Electric Corporation, Japan

C1.2. Orbital Dynamics (2)

October 2 2018, 09:45 — CCB Borgward

Co-Chair(s): *Filippo Graziani , G.A.U.S.S. Srl, Italy; Josep J. Masdemont , Universitat Politecnica de Catalunya (UPC), Spain;*
Rapporteur(s): *Simei Ji , Beijing Institute of Technology, China;*

IAC-18.C1.2.1
SOLAR SAIL PROPELLANT--FREE TRANSFER MANEUVERS BETWEEN LIBRATION POINT ORBITS AROUND THE COLLINEAR EQUILIBRIUM POINTS
Duan Xun, University of Barcelona, Spain

IAC-18.C1.2.2
IMPACT OF SOLAR RADIATION PRESSURE MODELLING ON ORBITAL DYNAMICS IN THE VICINITY OF BINARY ASTEROIDS
Isabelle Jean, McGill Univeristy, Canada

IAC-18.C1.2.3
SOLAR SAIL RESONANT PERIODIC ORBITS IN THE AUGMENTED EARTH-MOON QUASI-BICIRCULAR PROBLEM
Marc Jorba-Cuscó, University of Barcelona, Spain

IAC-18.C1.2.4
ANALYTICAL APPROACH TO CONSTRUCTION A REFERENCE MOTION FOR TETRAHEDRAL SATELLITE FORMATION
Mikhail Ovchinnikov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-18.C1.2.6
HIGH-FIDELITY SIMULATIONS OF BALLISTIC SMALL BODY LANDERS
Onur Çelik, The Graduate University for Advanced Studies, Japan

IAC-18.C1.2.7
NATURAL DYNAMICAL PROCESSES ON FAST ROTATING ASTEROIDS
Daniel Brack, Colorado Center for Astrodynamics Research, University of Colorado, United States

IAC-18.C1.2.8
STABILITY ANALYSIS OF QUASI-SATELLITE ORBITS AROUND PHOBOS
Hongru Chen, Observatoire de Paris, France

IAC-18.C1.2.9
UNCERTAINTY PROPAGATION IN ASTEROIDS SYSTEMS
Feng Jinglang, Nanjing University, China

IAC-18.C1.2.10
STABLE REGIONS NEAR TRIANGULAR LIBRATION POINTS OF BINARY ASTEROID SYSTEM
Yuying Liang, , China

IAC-18.C1.2.11
SPACECRAFT ATTITUDE IMPACT ON ORBITAL TRAJECTORIES IN ASTEROID MISSIONS
Dante Bolatti, Ryerson University, Canada

IAC-18.C1.2.12
EFFECT OF EARTH-MOON PERTURBATION ON THE DEFLECTION OF TETHERED ASTEROID SYSTEMS
Luis Marchi, National Institute for Space Research - INPE , Brazil

C1.3. Attitude Dynamics (1)

October 2 2018, 14:45 — CCB Borgward

Co-Chair(s): *Arun Misra , Mc Gill Institute for Aerospace Engineering (MIAE), Canada; Paolo Teofilatto , Sapienza University of Rome, Italy;*
Rapporteur(s): *Alexander Ovchinnikov , Rocket Space Corporation Energia, Russian Federation; Hao-Chi Chang , tiSPACE Inc., Unknown;*

IAC-18.C1.3.2
ATTITUDE CONTROL STRATEGY OF A TRANSFORMABLE SPACECRAFT FOR ORBITAL STATION-KEEPING AROUND SUN-EARTH L2
Yuki Kubo, University of Tokyo, Japan

IAC-18.C1.3.3
SOLARELASTIC STABILITY MODELING AND STRUCTURAL CONTROL OF A HELIOGYRO SOLAR SAIL
Adonis Pimienta-Penalver, University at Buffalo, United States

IAC-18.C1.3.4
PURE MAGNETIC CONTROL FOR ATTITUDE SLEW MANEUVERS
Giulio Avanzini, Università del Salento, Italy

IAC-18.C1.3.5
PERFORMANCE CHARACTERIZATION OF A NON-CONVENTIONAL STAR TRACKER BASED ON A HYPER-HEMISPHERICAL PANORAMIC CAMERA
Roberto Opromolla, University of Naples "Federico II", Italy

IAC-18.C1.3.6
TIME-OPTIMAL SPACECRAFT REORIENTATION UNDER MULTIPLE CONSTRAINTS VIA AN EFFICIENT HYBRID OPTIMIZER
Hui Wang, Beijing Institute of Technology, China

IAC-18.C1.3.7
ON THE SMOOTHING OF SLEWING PROFILES\\ FOR LOW THRUST TRANSFER TRAJECTORIES
Pelayo Peñarroya Rodríguez, OHB System AG-Bremen, Germany

IAC-18.C1.3.8
CISLUNAR NON-KEPLERIAN ORBITS RENDEZVOUS & DOCKING: 6DOF GUIDANCE AND CONTROL
Andrea Colagrossi, Politecnico di Milano, Italy

IAC-18.C1.3.9
TETHERED TOWING LARGE SPACE DEBRIS WITH FUEL RESIDUES BY A SMALL SPACECRAFT-TUG
Vladimir S. Aslanov, Samara National Research University, Russian Federation

IAC-18.C1.3.10
RIGID-FLEXIBLE COUPLING DYNAMICS OF TETHERED SPACE DEBRIS WITH SOLAR PANELS
Rui Qi, Beijing Institute of Technology, China

IAC-18.C1.3.11
MAGNETIC DETUMBLING OF FAST-TUMBLING PICOSATELLITES
Robert Fonod, Delft University of Technology (TU Delft), The Netherlands

C1.4. Attitude Dynamics (2)

October 3 2018, 09:45 — CCB Borgward

Co-Chair(s): *Gianmarco Radice , University of Glasgow, United Kingdom; James O'Donnell , National Aeronautics and Space Administration (NASA), Goddard Space Flight Center, United States;*
Rapporteur(s): *Shinji Hokamoto , Kyushu University, Japan;*

IAC-18.C1.4.1
HIGH STABILITY AND POINTING PERFORMANCE AOCS FOR THE ECULID MISSION
Alfredo Agenjo, SENER, Spain

IAC-18.C1.4.2
INVESTIGATION OF REDUNDANCY STRATEGIES IN FLUID-DYNAMIC ATTITUDE CONTROL
Sebastian Grau, Technische Universität Berlin, Germany

IAC-18.C1.4.3
CLOSED-CHAIN FORWARD DYNAMICS MODELING OF A FOUR-PANEL FOLDING SPACECRAFT STRUCTURE
JoAnna Fulton, University of Colorado Boulder, United States

IAC-18.C1.4.4
OPTIMAL CONTROL OF SPACECRAFT ATTITUDE MOTION USING PORT-HAMILTONIAN SYSTEMS
Sakamoto Tomoya, Kyushu University, Japan

IAC-18.C1.4.5
MINIMUM-ERROR SINGLE-AXIS POINTING FOR AN UNDERACTUATED SPACECRAFT IN THE PRESENCE OF A RESIDUAL ANGULAR MOMENTUM
Giulio Avanzini, Università del Salento, Italy

IAC-18.C1.4.6
BASE ATTITUDE STABILIZATION OF SPACE ROBOT WITH GUARANTEED PRESCRIBED PERFORMANCE
Mingming Wang, National Key Laboratory of Aerospace Flight Dynamics,Northwestern Polytechnical University, China

IAC-18.C1.4.7
LYAPUNOV CONTROL FOR ATTITUDE MANEUVERS WITH RESTRICTED AREAS
Stepan Tkachev, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-18.C1.4.8
ATTITUDE DYNAMICS OF AN ELECTRIC SAIL MODEL WITH A REALISTIC SHAPE
Marco Bassetto, University of Pisa, Italy

IAC-18.C1.4.9
PERFORMANCE ANALYSIS OF AN ATTITUDE CONTROL SYSTEM\\ FOR SMALL SATELLITES
Matteo Dentis, Politecnico di Torino, Italy

IAC-18.C1.4.10
NONLINEAR OBSERVER FOR ATTITUDE ESTIMATION AND RATE GYRO CALIBRATION
Sérgio Brás, HE Space, The Netherlands

IAC-18.C1.4.11
SYNERGETIC APPROACH IN ATTITUDE CONTROL OF VERY FLEXIBLE SATELLITES BY MEANS OF THRUSTERS AND PZT DEVICES
Marco Sabatini, Sapienza University of Rome, Italy

IAC-18.C1.4.12
LANDMARK ACQUISITION AND TRACKING USING VARIABLE SPEED CONTROL MOMENT GYROS
Abhilash Mony, Vikram Sarabhai Space Centre (VSSC), India

C1.5. Guidance, Navigation & Control (1)

October 3 2018, 14:45 — CCB Borgward

Co-Chair(s): Bernard Lübke-Ossenbeck , OHB System AG-Bremen, Germany; Igor V. Belokonov , Samara State Aerospace University, Russian Federation;
Rapporteur(s): Anton de Ruiter , Faculty of Engineering, Carleton University, Canada; Shoji Yoshikawa , Mitsubishi Electric Corporation, Japan;

IAC-18.C1.5.1
KEYNOTE: HOW TO SENSE GRAVITY?
Eberhard Gill, Delft University of Technology, The Netherlands

IAC-18.C1.5.2
NUMERICAL AND ANALYTICAL REACHABLE SET APPLICATIONS TO COOPERATIVE AND NON-COOPERATIVE MULTI-SPACECRAFT TRAJECTORY COORDINATION
Chandrakanth Venigalla, University of Colorado Boulder, United States

IAC-18.C1.5.3
JOINT ROBUST STRUCTURED DESIGN OF VEGA LAUNCHER'S RIGID-BODY CONTROLLER AND BENDING FILTER
Diego Navarro-Tapia, University of Bristol, United Kingdom

IAC-18.C1.5.4
FUEL-FREE MAGNETIC RENDEZVOUS USING MAGNETIC TORQUER FOR CUBESAT-SIZED SMALL SATELLITES
Takaya Inamori, Nagoya University, Japan

IAC-18.C1.5.5
HIL TESTING OF GNC/IP FOR APPROACH AND HOVERING OF IRREGULAR SMALL BODIES
Miguel Hagenfeldt, Deimos Space SLU, Spain

IAC-18.C1.5.6
SEMI-PHYSICAL SIMULATION EXPERIMENT ON THE ON-ORBIT CAPTURE OF TUMBLING UNCOOPERATIVE TARGET SPACECRAFT
Yong Chun Xie, Beijing Institute of Control Engineering, China Academy of Space Technology (CAST), China

IAC-18.C1.5.7
ATTITUDE AND RELATIVE MOTION CONTROL OF SATELLITES IN FORMATION FLYING VIA SOLAR SAIL WITH VARIABLE REFLECTIVITY PROPERTIES
Mikhail Ovchinnikov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-18.C1.5.8
A CALIBRATION APPROACH FOR SMALL SATELLITE MAGNETOMETERS CONSIDERING TIME-VARYING ERRORS
Halil Ersin Soken, Japan Aerospace Exploration Agency (JAXA), ISAS, Japan

IAC-18.C1.5.9
HAZARD RELATIVE NAVIGATION FOR PRECISE PLANETARY LANDINGS
Svenja Woicke, Delft University of Technology (TU Delft), The Netherlands

IAC-18.C1.5.10
AUTONOMOUS CLOSE-PROXIMITY OPERATIONS IN SPACE: THE PROBA-3 RENDEZVOUS EXPERIMENT (P3RVX)
Paulo Rosa, Elecnor Deimos, Portugal

IAC-18.C1.5.11
ON-BOARD MODEL-BASED FAULT DIAGNOSIS FOR AUTONOMOUS PROXIMITY OPERATIONS
Peter Schulte, Georgia Institute of Technology, School of Aerospace Engineering, United States

IAC-18.C1.5.12
GUIDANCE COMMAND GENERATION AND NONLINEAR DYNAMIC INVERSION CONTROL FOR REUSABLE LAUNCH VEHICLES
Paul Acquatella B., DLR, German Aerospace Center, Germany

C1.6. Guidance, Navigation & Control (2)

October 4 2018, 09:45 — CCB Borgward

Co-Chair(s): *Fuyuto Terui , Japan Aerospace Exploration Agency (JAXA), Japan; Stephan Theil , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Yong Chun Xie , Beijing Institute of Control Engineering, China Academy of Space Technology (CAST), China;*

IAC-18.C1.6.1
NETWORKED AND DISTRIBUTED COOPERATIVE ATTITUDE CONTROL OF FRACTIONATED SMALL SATELLITES
Florian Kempf, University of Würzburg, Germany

IAC-18.C1.6.2
BALANCING DIFFERENTIAL DRAG WITH COULOMB REPULSION IN LOW EARTH ORBIT PLASMA WAKES
Jordan Maxwell, Colorado Center for Astrodynamics Research, University of Colorado, United States

IAC-18.C1.6.3
ULTRA-SOFT ELECTROMAGNETIC DOCKING WITH APPLICATIONS TO IN-ORBIT ASSEMBLY
Rebecca Foust, University of Illinois at Urbana-Champaign, United States

IAC-18.C1.6.4
LISA L3 GRAVITY WAVE OBSERVATORY: NON-LINEAR MODELLING AND PRELIMINARY DFAC ARCHITECTURE
Carlo Novara, Politecnico di Torino, Italy

IAC-18.C1.6.5
optimal trajectory design for safety rendezvous based on sparse modeling
Satoshi Nagashima, Kyushu University, Japan

IAC-18.C1.6.7
INS/ST/OPTICAL SENSOR INTEGRATED ALGORITHM WITH WEIGHTED MULTI-OBSERVATION
KIDUCK KIM, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

IAC-18.C1.6.8
IMAGE-BASED AUTONOMOUS GUIDANCE, NAVIGATION AND CONTROL OF SPACECRAFT
Katsuya Sakamoto, The University of TOKYO, Graduate school, Japan

IAC-18.C1.6.10
PERFORMANCE ANALYSIS OF REAL-TIME OPTIMAL GUIDANCE METHODS FOR VERTICAL TAKE-OFF, VERTICAL LANDING VEHICLES
Andreas Wenzel, German Aerospace Center (DLR), Bremen, Germany

IAC-18.C1.6.11
AUTONOMOUS SMALL BODY MAPPING AND SPACECRAFT NAVIGATION VIA REAL-TIME SPC-SLAM
Francesca Baldini, California Institute of Technology, United States

IAC-18.C1.6.12
PATH PLANNING AND GUIDANCE ALGORITHMS FOR FORMATION RECONFIGURATION
Salvatore Sarno, Università degli Studi della Campania "Luigi Vanvitelli", Italy

IAC-18.C1.6.13
FEASIBILITY ASSESSMENT OF AUTONOMOUS OPTICAL NAVIGATION IN LUMIO MISSION
Vittorio Franzese, Politecnico di Milano, Italy

C1.7-A6.10. Orbital Safety and Optimal Operations in an Increasingly Congested Environment (Joint Astrodynamics/Space Debris Session)

October 4 2018, 14:45 — CCB Borgward

Co-Chair(s): *Daniel Scheeres , Colorado Center for Astrodynamics Research, University of Colorado, United States; Yukihito Kitazawa , JAXA, Japan;*
Rapporteur(s): *Anilkumar A K , Vikram Sarabhai Space Centre (VSSC), India; Moriba Jah , The University of Texas at Austin, United States;*

IAC-18.C1.7-A6.10.1
GOES 8 TUMBLING SPIN STATE EVOLUTION AND THE IMPLICATIONS FOR GEO DEBRIS MITIGATION
Conor Benson, Colorado Center for Astrodynamics Research, University of Colorado, United States

IAC-18.C1.7-A6.10.2
UNCERTAINTY AND DATA OBSERVABILITY ANALYSIS FOR RSO MASS/ALBEDO-AREA ESTIMATION
Vishnuu Mallik, The University of Texas at Austin, United States

IAC-18.C1.7-A6.10.3
LONG-TERM DYNAMICAL EVOLUTION ANALYSIS AND LUNI-SOLAR RESONANCES FOR INCLINED GEOSTATIONARY TRANSFER ORBITS
Yue Wang, Beihang University, China

IAC-18.C1.7-A6.10.4
AUTOMATED NEAR REAL-TIME VALIDATION AND EXPLOITATION OF OPTICAL SENSOR DATA FOR IMPROVED ORBITAL SAFETY
Thomas Kelecy, Applied Defense Solutions, Inc., United States

IAC-18.C1.7-A6.10.5
USING REACHABILITY TO COMPUTE UNSAFE REGIONS IN STATE SPACE THROUGH SAMPLING METHODS
Julian Brew, Georgia Institute of Technology, United States

IAC-18.A6.10.6
RAPID MODELING OF ELECTROSTATIC FORCES AND TORQUES CONSIDERING DIELECTRICS
Joseph Hughes, University of Colorado Boulder, United States

IAC-18.C1.7-A6.10.7
DEBRIS COLLISION AVOIDANCE BY MEANS OF ATTITUDE CONTROL - IN FLIGHT DEMONSTRATION WITH TET-1
Maren Huelsmann, DLR (German Aerospace Center), Germany

IAC-18.C1.7-A6.10.8
EVOLUTION OF FRAGMENTATION CLOUD IN HIGHLY ECCENTRIC EARTH ORBITS THROUGH CONTINUUM MODELLING
Stefan Frey, Politecnico di Milano, Italy

IAC-18.C1.7-A6.10.9
LEDSAT: A LED-BASED LEO DEMONSTRATOR FOR SPACE DEBRIS ORBIT AND ATTITUDE DETERMINATION
Paolo Marzioli, Sapienza University of Rome, Italy

IAC-18.C1.7-A6.10.10
THE CONCEPT OF THE FUNCTIONING OF A SPACE VEHICLE - A SPACE DEBRIS COLLECTOR WITH A VIEW TO REMOVING OBJECTS OF SPACE DEBRIS INTO ORBIT OF A BURIAL
Vsevolod Koryanov, Bauman Moscow State Technical University, Russian Federation

IAC-18.C1.7-A6.10.11
DYNAMICAL SYSTEM DESCRIPTION OF THE SOLAR RADIATION PRESSURE AND J2 PHASE SPACE FOR END-OF-LIFE DESIGN AND FROZEN ORBIT DESIGN
Elisa Maria Alessi, IFAC-CNR, Italy

IAC-18.C1.7-A6.10.12
LOW THRUST MANOEUVRE DETECTION FOR LOW EARTH ORBIT SPACE OBJECTS
Steve Gehly, University of New South Wales, Australia

C1.8. Mission Design, Operations & Optimization (1)

October 5 2018, 09:45 — CCB Borgward

Co-Chair(s): *Johannes Schoenmaekers , European Space Operations Centre, Germany; Richard Epenoy , Centre National d'Etudes Spatiales (CNES), France;*
Rapporteur(s): *Massimiliano Vasile , University of Strathclyde, United Kingdom; Stéphanie Lizy-Destrez , SUPAERO- Ecole Nationale Supérieure de l'Aéronautique et de l'Espace, France;*

IAC-18.C1.8.1
CURRENT STATUS OF THE ON-GOING ORBIT TRANSFER OF SUPER LOW ALTITUDE TEST SATELLITE (SLATS)
Shunsuke Imamura, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.C1.8.2
OPTIMIZATION OF RADIATION EXPOSURE FOR LOW-THRUST MISSIONS WITH A SHAPE-BASED METHOD
Volker Maiwald, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.C1.8.3
FLOWER CONSTELLATIONS FOR EARTH COVERAGE WITH BIG NUMBER OF SATELLITES
Yury Razoumny, Peoples' Friendship University of Russia (RUDN University), Russian Federation

IAC-18.C1.8.4
MULTI-RENDEZVOUS TRAJECTORY OPTIMIZATION WITH NEURAL NETWORK AND REINFORCEMENT LEARNING
Haiyang Li, Tsinghua University School of Aerospace, China

IAC-18.C1.8.5
AN INTRUSIVE POLYNOMIAL ALGEBRA MULTIPLE SHOOTING APPROACH TO THE SOLUTION OF OPTIMAL CONTROL PROBLEMS
Cristian Greco, University of Strathclyde, United Kingdom

IAC-18.C1.8.6
LYAPUNOV-BASED LOW-ENERGY LOW-THRUST TRANSFERS TO THE MOON
Richard Epenoy, Centre National d'Etudes Spatiales (CNES), France

IAC-18.C1.8.7
OPTIMAL ESCAPE MANIFOLDS FOR CIS-LUNAR HALO ORBITS
Lorenzo Bucci, Politecnico di Milano, Italy

IAC-18.C1.8.8
GAUSS' VARIATIONAL EQUATIONS FOR LOW-THRUST OPTIMAL CONTROL PROBLEMS IN LOW-ENERGY REGIMES
Rita Neves, Cranfield University, United Kingdom

IAC-18.C1.8.9
LOW-THRUST TRAJECTORY DESIGN VIA DIRECT TRANSCRIPTION LEVERAGING STRUCTURES FROM THE LOW-THRUST RESTRICTED PROBLEM
Robert Pritchett, Purdue University, United States

IAC-18.C1.8.10
TRANSFERS BETWEEN NEAR-RECTILINEAR HALO ORBITS AND THE MOON
Sergey Trofimov, Keldysh Institute of Applied Mathematics, RAS, Russian Federation

IAC-18.C1.8.11
ON THE SOPHISTICATED ORBIT DESIGN OF THE LUNAR METEOROID IMPACTS OBSERVER CUBESAT
Diogene Alessandro Dei Tos, Politecnico di Milano, Italy

IAC-18.C1.8.12
DO YOU SEE WHAT I SEE?: INTERACTIVE VISUALIZATION OF MISSION DESIGN AND NAVIGATION
Jeffrey Stuart, Jet Propulsion Laboratory - California Institute of Technology, United States

C1.9. Mission Design, Operations & Optimization (2)

October 5 2018, 13:30 — CCB Borgward

Co-Chair(s): *Vincent Martinot , Thales Alenia Space France, France; Xiaoqian Chen , National Innovation Institute of Defense Technology, Chinese Academy of Military Science, China;*
Rapporteur(s): *Kathleen Howell , Purdue University, United States; Michèle Lavagna , Politecnico di Milano, Italy;*

IAC-18.C1.9.1
RAPID TRAJECTORY DESIGN IN COMPLEX ENVIRONMENTS ENABLED VIA SUPERVISED AND REINFORCEMENT LEARNING STRATEGIES
Ashwati Das-Stuart, Purdue University, United States

IAC-18.C1.9.2
TRAJECTORY OPTIMISATION FOR THE ESA SWM MISSION TO SUN-EARTH L5
Pablo Hermosin, Deimos Space SLU, Spain

IAC-18.C1.9.3
WIDE-FIELD INFRARED SURVEY TELESCOPE AND STARSHADE FORMATION FLYING DYNAMICS AT SUN-EARTH L2
Ariadna Farres, NASA Goddard/University of Maryland, Baltimore County (UMBC), United States

IAC-18.C1.9.4
ORBIT MAINTENANCE OF QUASI-SATELLITE TRAJECTORIES VIA MEAN RELATIVE ORBIT ELEMENTS
Nicola Baresi, Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.C1.9.5
MAVEN OPTIMAL AEROBRAKE MANEUVER ESTIMATION
Bruno Sarli, The Catholic University of America, United States

IAC-18.C1.9.7
DOUBLE ASTEROID REDIRECTION TEST (DART) MISSION DESIGN AND NAVIGATION FOR LOW ENERGY ESCAPE
Justin Atchison, The Johns Hopkins University Applied Physics Laboratory, United States

IAC-18.C1.9.8
ESTIMATION EVALUATION OF THE RADIO SCIENCE PHASE OF THE OSIRIS-REX MISSION
Daniel Brack, Colorado Center for Astrodynamics Research, University of Colorado, United States

IAC-18.C1.9.9
LOW-ENERGY TRAJECTORY DESIGN AND AUTONOMOUS NAVIGATION TO FLYBY NEAR-EARTH ASTEROIDS USING CUBESATS
Pablo Machuca, Cranfield University, United Kingdom

IAC-18.C1.9.10
MISSION DESIGN OF DESTINY+
Takayuki Yamamoto, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.C1.9.11
TOUR DESIGN TECHNIQUES FOR THE EUROPA CLIPPER MISSION
Stefano Campagnola, National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States

IAC-18.C1.9.12
ADAPTED SYZYGY FUNCTIONS FOR THE PRELIMINARY DESIGN OF MULTI GRAVITY ASSISTS TRAJECTORIES
Davide Menzio, Politecnico di Milano, Italy

IAC-18.C1.9.13
HYBRID DIFFERENTIAL DYNAMIC PROGRAMMING ALGORITHM FOR LOW-THRUST TRAJECTORY DESIGN USING EXACT HIGH-ORDER TRANSITION MAPS
Michele Maestrini, Politecnico di Milano, Italy

C2. IAF MATERIALS AND STRUCTURES SYMPOSIUM

Coordinator(s): *Andreas Rittweger , DLR (German Aerospace Center), Germany; Paolo Gasbarri , Sapienza University of Rome, Italy;*

C2.1. Space Structures I - Development and Verification (Space Vehicles and Components)

October 1 2018, 15:00 — ÖVB 2

Co-Chair(s): *Alwin Eisenmann , IABG Industrieanlagen - Betriebsgesellschaft mbH, Germany; Andreas Rittweger , DLR (German Aerospace Center), Germany;*
Rapporteur(s): *Jochen Albus , ArianeGroup, Germany;*

IAC-18.C2.1.1 (non-confirmed)
GROUND EXPERIMENTAL INVESTIGATION OF THERMODYNAMIC VENT SYSTEM FOR PROPELLANT ON-ORBIT STORAGE
Xiaoyu Zhang, China Academy of Launch Vehicle Technology(CALT), China

IAC-18.C2.1.2
DUAL TECHNOLOGY STRAIN GAUGE FOR ON-ORBIT SPACE STRUCTURES HEALTH MONITORING. CASE REPORT: TOP SEE
Lorenzo Grossi, Progem, Italy

IAC-18.C2.1.3
ANALYTICAL, NUMERICAL AND EXPERIMENTAL PREDICTIONS FOR FREE VIBRATIONS AND BUCKLING OF PRESSURIZED ORTHOTROPIC CYLINDRICAL SHELLS
Felipe Franzoni, DLR (German Aerospace Center), Germany

IAC-18.C2.1.4
BRAZILIAN VLM - ATMOSPHERIC STAGE SEPARATION ANALYSIS
Élcio Jeronimo de Oliveira, Instituto Nacional de Pesquisas Espaciais (INPE), Brazil

IAC-18.C2.1.5
A SYSTEMATIC APPROACH TO THE STRUCTURAL DESIGN VERIFICATION FOR SPACE PAYLOADS, LESSONS LEARNED FROM SOLAR ORBITER EPT-HET INSTRUMENT
Ali Ravanbakhsh, University of Kiel, Germany

IAC-18.C2.1.6
OPTIMIZATION OF LAUNCHER LIQUID PROPELLANT TANKS IN CFRP
Alexander Schütte, ArianeGroup, Germany

IAC-18.C2.1.7
SPECIAL TESTING AND TEST STRATEGIES FOR UNIQUE SPACE HARDWARE DEVELOPMENTS
Patric Seefeldt, German Aerospace Center (DLR), Germany

IAC-18.C2.1.8
ASSEMBLY AND QUALIFICATION OF A MODULAR SATELLITE STRUCTURE
Thomas A. Schervan, RWTH Aachen University, Germany

IAC-18.C2.1.9 (non-confirmed)
A GENERAL FRAMEWORK FOR AERODYNAMIC THERMAL TEST OF LAUNCH VEHICLE FAIRING
Lingling CAO, Shanghai Academy of Spaceflight Technology (SAST), China Aerospace and Technology Corporation (CASC), China

IAC-18.C2.1.10
STRUCTURE DEVELOPMENT OF THE HP3 INSTRUMENT SUPPORT SYSTEM FOR THE MARS MISSION INSIGHT
Tom Sproewitz, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.C2.1.11
DESIGN OPTIMISATION AND MASS SAVING OF THE STRUCTURE OF THE ORION-MPCV EUROPEAN SERVICE MODULE
Gandolfo Di Vita, ESA european space agency, The Netherlands

IAC-18.C2.1.12
DESIGN OF A FLIGHT LOAD MEASUREMENT SYSTEM FOR SOUNDING ROCKETS
Karl Domjahn, DLR (German Aerospace Center), Australia

IAC-18.C2.1.13
Topology Optimization of UokSat3
Amr Elhussein, University of Khartoum, Sudan

C2.2. Space Structures II - Development and Verification (Deployable and Dimensionally Stable Structures)

October 2 2018, 09:45 — ÖVB 2

Co-Chair(s): *Oliver Kunz , RUAG Space, Switzerland; Paolo Gasbarri , Sapienza University of Rome, Italy;*
Rapporteur(s): *Pierre Rochus , CSL (Centre Spatial de Liège), Belgium;*

IAC-18.C2.2.1
SPATIAL DISTRIBUTION PROPERTY OF SURFACE DISTORTION OF SQUARE MEMBRANE WITH WRINKLES SUBJECTED TO SHEAR AND TENSION LOADS
Takashi Iwasa, Tottori University, Japan

IAC-18.C2.2.2
APPLICATION OF SELF-DEPLOYABLE TRUSS TO STARSHADE
Momoko Fukunaga, Nihon University, Japan

IAC-18.C2.2.3 (non-confirmed)
SCIENTIFIC PROBLEMS AND ENGINEER RESOLVENT DURING DEVELOPMENT OF LARGE DEPLOYABLE MESH ANTENNA
Jungang Yang, Xi'an Institute of Space Radio Technology, China

IAC-18.C2.2.4
THE DEPLOYABLES OF HPS: LARGE ANTENNAS, DE-ORBITING DRAG SAILS AND ARTICULATED BOOMS
Thomas Sinn, HPS GmbH, Germany

IAC-18.C2.2.5
SPACE ROBOT DYNAMIC ANALYSIS OF THE RELATIVE ORBITAL AND ATTITUDE MOTION IN THE CLOSE RANGE RENDEZVOUS PHASE AND GRASPING OF A TARGET SPACE VEHICLE
Ijar Da Fonseca, ITA-DCTA, Brazil

IAC-18.C2.2.6
OPTIMAL IN-ORBIT OPERATIONS OF A SEVEN-DEGREE OF FREEDOM SPACE MANIPULATOR
Angelo Stolfi, Sapienza University of Rome, Italy

IAC-18.C2.2.7
CONCEPT AND STRUCTURAL PROPERTIES OF DEPLOYABLE BOOM WITH CORRUGATED CLOSED SECTION
Hideaki Okada, Tokyo Institute of Technology, Japan

IAC-18.C2.2.8
DEPLOYMENT DYNAMICS OF MESH ANTENNAS WITH A NOVEL MULTISCALE MODELING APPROACH
Zhihua Zhao, Tsinghua University, China

IAC-18.C2.2.9
TEST AND ANALYTIC MODEL RESULTS CORRELATION FOR DEPLOYABLE TRUSSWORK MAST
Cristovao Cardoso, Hps-high Performance Structures, Lda, Portugal

IAC-18.C2.2.10
ACCURATE THERMO-MECHANICAL ANALYSIS OF COMPOSITE TRUSS STRUCTURES FOR SPACE APPLICATIONS
Enrico Zappino, Politecnico di Torino, Italy

IAC-18.C2.2.12
VISCOELASTIC BEHAVIOR OF THIN-PLY COMPOSITES FOR DEPLOYABLE STRUCTURES
Andrew Gomez-Delrio, University of Central Florida (UCF), United States

C2.3. Space Structures - Dynamics and Microdynamics

October 2 2018, 14:45 — ÖVB 2

Co-Chair(s): *Harijono Djojodihardjo , , Indonesia; Ijar Da Fonseca , ITA-DCTA, Brazil;*
Rapporteur(s): *Antonio Del Vecchio , CIRA Italian Aerospace Research Centre, Italy;*

IAC-18.C2.3.1
OPTIMIZATION OF SATELLITE VIBRO-ACOUSTIC MODELLING TECHNIQUES BASED ON THE SGEO PLATFORM PFM ACOUSTIC TEST RESULTS
Marcel Otto, OHB System AG-Bremen, Germany

IAC-18.C2.3.2
UNIFIED PIEZOELECTRIC VIBRATION CONTROL OF ACOUSTICALLY AND ENVIRONMENTALLY EXCITED STRUCTURE
Harijono Djojodihardjo, , Indonesia

IAC-18.C2.3.3
ANALYSIS OF THE INFLUENCE OF SMALL ASYMMETRIES ON THE OCCURRENCE OF PROGRESSIVE SELF-ROTATION OF A SPACE LANDING VEHICLE
Vsevolod Koryanov, Bauman Moscow State Technical University, Russian Federation

IAC-18.C2.3.4
BARTOLOMEO MICRO-G DISTURBANCE CONTROL AT PAYLOADS
Riccardo Sgobbo, Airbus DS GmbH, Germany

IAC-18.C2.3.5
AUGMENTED CONTROL OF INVERSION OF THE SPINNING SPACECRAFT, USING INERTIAL MORPHING
Pavel M. Trivailo, RMIT University, Australia, Australia

IAC-18.C2.3.6
STUDY OF IMAGE CORRECTION METHOD USING IMAGE MOTION DETECTED WITH INERTIAL SENSORS
Osamu Takahara, Mitsubishi Electric Corporation, Japan

IAC-18.C2.3.7
CONTACT DYNAMICS OF A SPACE ROBOT CAPTURING A SATELLITE BY THE APOGEE KICK MOTOR NOZZLE
Vinicius Piro Barragam, ITA-DCTA, Brazil

IAC-18.C2.3.8
VLM-1 MODELING AND CONTROL WITH STRUCTURAL BENDING MODES
Élcio Jeronimo de Oliveira, Instituto Nacional de Pesquisas Espaciais (INPE), Brazil

IAC-18.C2.3.9
OPTIMAL DESIGN OF A NET OF ADAPTIVE STRUCTURES FOR MICRO-VIBRATION CONTROL IN LARGE SPACE MESH REFLECTORS
Federica Angeletti, Sapienza University of Rome, Italy

IAC-18.C2.3.10
MANAGING THE MICROVIBRATION IMPACT ON SATELLITE PERFORMANCES
Frank Steier, OHB System AG, Germany

IAC-18.C2.3.12
DYNAMICS OF SUPER LARGE SPACE STRUCTURES WITH MOVING COMPONENTS
Ruinan Mu, Dalian University of Technology, China

C2.4. Advanced Materials and Structures for High Temperature Applications

October 3 2018, 09:45 — ÖVB 2

Co-Chair(s): *David E. Glass , National Aeronautics and Space Administration (NASA), United States; Marc Lacoste , ArianeGroup, France;*
Rapporteur(s): *Zijun Hu , China Academy of Launch Vehicle Technology (CALT), China;*

IAC-18.C2.4.1
KEYNOTE: SANTINI LECTURE, GIVEN BY GERBEN SINNEMA: SAFETY OF SPACEFLIGHT STRUCTURES - THE APPLICATION OF FRACTURE AND DAMAGE CONTROL
Gerben Sinnema, European Space Agency (ESA-ESTEC), The Netherlands

IAC-18.C2.4.2 (non-confirmed)
AERODYNAMIC HEATING RESEARCH OF SCRAMJET INLET THROUGH THE DUPLICATING HYPERSONIC FLIGHT CONDITION WIND TUNNEL
Zhaowei Wang, China Academy of Launch Vehicle Technology (CALT), China

IAC-18.C2.4.3
ARCHITECTURED CERAMICS WITH IMPROVED TOUGHNESS FOR HIGH TEMPERATURE APPLICATIONS
Hamidreza Yazdani Sarvestani, National Research Council, Canada

IAC-18.C2.4.4
CHARACTERIZATION OF CARBON-FIBER REINFORCED ULTRA-HIGH-TEMPERATURE CERAMIC MATRIX COMPOSITES IN ARC-JET ENVIRONMENT
Stefano Mungiguerra, Università degli Studi di Napoli "Federico II", Italy

IAC-18.C2.4.5
INVESTIGATION OF PASSIVE TO ACTIVE OXIDATION TRANSITION ON ULTRA HIGH TEMPERATURE CERAMICS
Daniel Galla, , Germany

IAC-18.C2.4.7
ANALYSIS AND TEST RESULTS ON HEAT INSULATION PERFORMANCE OF LIGHTWEIGHT THERMAL PROTECTION STRUCTURE
CHEN XUAN, Science and Technology on Space Physics Laboratory, China

IAC-18.C2.4.8
OXIDATION AND HETEROGENEOUS CATALYSIS ON TITANIUM TI-6AL-4V IN HIGH-ENTHALPY FLOWS
Bartomeu Massuti Ballester, IRS, University of Stuttgart, Germany

IAC-18.C2.4.9
PROPERTIES OF CARBON REINFORCED POLYBENZOXAZINE RESIN COMPOSITES – AN ABLATIVE MATERIAL WITH NEW STRUCTURE
Yalin Guo, Xi'an Aerospace Composites Research Institute, China

IAC-18.C2.4.10
OPTIMAL DESIGN OF THERMAL PROTECTION CONSIDERING THE CARBON FOAM MORPHOLOGY
Oleg Alifanov, Moscow Aviation Institute, Russian Federation

C2.5. Smart Materials and Adaptive Structures

October 3 2018, 14:45 — ÖVB 2

Co-Chair(s): *Hiroshi Furuya , Tokyo Institute of Technology, Japan; Pavel M. Trivailo , RMIT University, Australia, Australia;*
Rapporteur(s): *Paolo Gaudenzi , Sapienza University of Rome, Italy;*

IAC-18.C2.5.1
MODULAR MECHATRONIC COMPONENT DEVELOPMENT
Armin Wedler, German Aerospace Center (DLR), Germany
IAC-18.C2.5.2
DEVELOPMENT OF SHAPE MONITORING SYSTEM USING SMA DIPOLE ANTENNA ON A DEPLOYABLE MEMBRANE STRUCTURE.
Ayako Kayaba, Tokyo Metropolitan University, Japan

IAC-18.C2.5.3
DESIGN AND PERFORMANCE EVALUATION OF AN AEROELASTIC ENERGY HARVESTER BASED ON THE LIMIT CYCLE OSCILLATION PHENOMENON
Hassan Elahi, Sapienza University of Rome, Italy

IAC-18.C2.5.4
DEVELOPMENT OF GECKO-INSPIRED ADHESIVE MATERIALS FOR SPACE APPLICATIONS
Christopher Trentlage, Technische Universität Braunschweig, Institute of Space Systems, Germany

IAC-18.C2.5.5
AN EFFICIENT FINITE ELEMENT MODEL UPDATING APPROACH BASED ON THE ENSEMBLE KALMAN FILTER WITH SYSTEM NOISE SWITCHING CONTROL
Takeshi Akita, Chiba Institute of Technology, Japan

IAC-18.C2.5.6
ANALYSIS OF BIDIRECTIONAL REFLECTION DISTRIBUTION FUNCTION ON A SOLAR CELL WITH A MICROSTRUCTURE
Shuya Kashioka, The Graduate Universty for Advanced Studies[SOKENDAI], Japan

IAC-18.C2.5.7
POSS-POSS Nanostructures for Energy Absorption
Blaze Heckert, Oklahoma State University (OSU), United States

IAC-18.C2.5.8
IN SITU STRUCTURAL HEALTH MONITORING AND ANTI-DELAMINATION OF LAMINATED COMPOSITES WITH MULTIFUNCTIONAL CARBON NANOTUBES FILMS
Dedong Huang, College of Astronautics, Northwestern Polytechnical University (NPU), China

IAC-18.C2.5.10
EVALUATING GRAPHENE-ENHANCED MATERIALS FOR SPACE-BASED STRUCTURAL APPLICATIONS
Robert Walsh, , United Kingdom

IAC-18.C2.5.11
TOWARDS FLIGHT QUALIFICATION OF AN ADDITIVELY MANUFACTURED NANOSATELLITE COMPONENT
Marius Bierdel, Fraunhofer EMI, Germany

IAC-18.C2.5.12
DECOMPOSITION PROBLEMS IN DYNAMICS OF GYROSTABILIZATION SYSTEMS FOR SMALL SATELLITES
Lyudmila Kuzmina, Kazan National Research Technical University, Russian Federation

IAC-18.C2.5.13
DEVELOPMENT AND DESIGN OF MULTIFUNCTIONAL LIGHTWEIGHT STRUCTURES FOR SATELLITE APPLICATIONS
Martin Schubert, RWTH Aachen University - Institut fuer Leichtbau, Germany

C2.6. Space Environmental Effects and Spacecraft Protection

October 4 2018, 09:45 — ÖVB 2

Co-Chair(s): *Anatolii Lohvynenko , Yuzhnoye State Design Office, Ukraine; Giuliano Marino , CIRA Italian Aerospace Research Centre, Italy;*
Rapporteur(s): *Kyeum-rae Cho , Pusan National University, Korea, Republic of;*

IAC-18.C2.6.1
HYPERVELOCITY IMPACT TEST CAMPAIGN OF INFLATABLE MODULES FOR LUNAR ORBITAL APPLICATION
Natalia Goldenko, TSNIIMASH, Russian Federation

IAC-18.C2.6.2
SPACE RADIATION RESISTANT INORGANIC/POLYMER NANOCOMPOSITE SOLAR SAIL MEMBRANES
Jin Ho Kang, National Institute of Aerospace, United States

IAC-18.C2.6.3
FUTURE RADIATION TESTING: ADAPT OR FAIL
Jochen Kuhnhenn, Fraunhofer INT, Germany

IAC-18.C2.6.4
COMPRESSION BEHAVIOUR OF COMPOSITE SANDWICH PANELS IMPACTED AT EXTREME TEMPERATURES FOR SPACE APPLICATIONS
Mathilde Jean-St-Laurent, Universite Laval, Canada

IAC-18.C2.6.5
POLYETHYLENE-BASED NANOCOMPOSITES FOR RADIATION SHIELDING: MODELLING IN RADIATIVE ENVIRONMENT AND LABORATORY TESTS IN THERMO-VACUUM CHAMBER
Susanna Laurenzi, Sapienza University of Rome, Italy

IAC-18.C2.6.6
EXPERIMENTAL STUDY OF SOLAR RADIATION EFFECTS ON CARBON NANOCOMPOSITE SENSORS IN SIMULATED SPACE ENVIRONMENT
M. Gabriella Santonicola, Sapienza University of Rome, Italy

IAC-18.C2.6.7
OPTIMIZATION OF SATELLITE PROTECTION FROM THE SPACE RADIATION EFFECTS
Oleg Dotsenko, Yuzhnoye State Design Office, Ukraine

IAC-18.C2.6.8
RAVI-2017: A SOLAR PROTON FLUENCE MONITOR FOR LEO NANOSATELLITE MISSIONS BASED ON COTS ELECTRONICS
Bhaskar Mukherjee, The University of Sydney, Australia

IAC-18.C2.6.9
RADIATION TESTS WITH PARTIALLY OPEN HARDWARE SYSTEM-ON-A-CHIP COMPUTERS FOR APPLICATIONS IN SPACE
Anja Kohfeldt, Technische Universität Berlin, Germany

IAC-18.C2.6.10
MODELING AND EXPERIMENTAL RESULTS OF UV ENHANCEMENT EFFECT ON SPACECRAFT MOLECULAR CONTAMINATION
Jia-wen Qiu, China Academy of Space Technology (CAST), China

IAC-18.C2.6.12
SIMULATION OF THE TOTAL IONIZING DOSE FOR THE ORGANIC PHOTOVOLTAIC MATERIAL (PCBM) IN SPACE RADIATION ENVIRONMENTS AND EQUIVALENT FLUX OF DAMAGE TO SOLAR CELLS (EFFLUX)
Yair Israel Piña López, Universidad Nacional Autónoma de México, Mexico

C2.7. Space Vehicles – Mechanical/Thermal/ Fluidic Systems

October 4 2018, 14:45 — ÖVB 2

Co-Chair(s): *Brij Agrawal , Naval Postgraduate School, United States; Oleg Alifanov , Moscow Aviation Institute, Russian Federation;*
Rapporteur(s): *Guoliang Mao , Beijing Institute of Aerodynamics, China;*

IAC-18.C2.7.1
AUTOMATED THERMAL MODEL CORRELATION TOOL FOR SPACE APPLICATIONS
Martin Trinoga, ArianeGroup, Germany

IAC-18.C2.7.3 (non-confirmed)
MICRO-PUMPED COOLING LOOP TO STANDARDIZE MICRO-SAT THERMAL CONTROL
Johannes van Es, National Aerospace Laboratory (NLR), The Netherlands

IAC-18.C2.7.4 (non-confirmed)
A BACKUP SYSTEM OF A SATELLITE ORIENTATION BASED ON INVERSE PROBLEMS TECHNIQUE
Aleksey V. Nenarokomov, Moscow Aviation Institute, Russian Federation

IAC-18.C2.7.5
EVALUATION OF THERMAL ANALYSIS OF ORBITAL ENVIRONMENT OF MICROSATELLITE ALEE
Mina Konaka, Tohoku University, Japan

IAC-18.C2.7.6
THE WAY OF DEFINING A POWERFUL METHOD FOR SUPERSONIC AND HYPERSONIC WINGED SPACECRAFT AERODYNAMICS PREDICTION
Olena Koliada, Yuzhnoye State Design Office, Ukraine

IAC-18.C2.7.7
THERMAL LOADS SIMULATORS AND SETUP STRATEGIES OF THERMAL TESTS FOR SMALL SATELLITES
Roy Stevenson Soler Chisabas, Brazilian National Institute for Space Research - INPE, Brazil

IAC-18.C2.7.9
USING THE "COMPARATIVE TEST METHOD" TO DETERMINE THE HEAT STATUSES FOR THE HEAT SHIELDS OF SPACECRAFT
Oleg Alifanov, Moscow Aviation Institute, Russian Federation

IAC-18.C2.7.10
EXPERIMENTAL AND NUMERICAL STUDY ON THE PCM THERMAL CONTROL DEVICE FOR SPACECRAFT ELECTRONICS
Taig Young Kim, Korea Polytechnic University, Korea, Republic of

IAC-18.C2.7.11
THERMAL CONTROL OF HIGH POWER APPLICATIONS ON CUBESATS
Katja Janzer, Technische Universität München, Germany

IAC-18.C2.7.12
THE INFLUENCE OF SHOCK WAVE ON ABLATION THERMAL ENVIRONMENT OF RE-ENTRY VEHICLE PROTUBERANCE
Dongbin Ou, China Academy of Aerospace Aerodynamics (CAAA), China

C2.8. Specialised Technologies, Including Nanotechnology

October 5 2018, 09:45 — ÖVB 2

Co-Chair(s): *Mario Marchetti , Sapienza University of Rome, Italy; Pierre Rochus , CSL (Centre Spatial de Liège), Belgium;*
Rapporteur(s): *Bangcheng Ai , China Aerospace Science and Industry Corporation, China;*

IAC-18.C2.8.1
ATOMIC OXYGEN EFFECTS EVALUATION ON HIGH THICKNESS CARBON-CARBON NANO-COATED STRUCTURES FOR RE-ENTRY APPLICATIONS
Andrea Delfini, Sapienza University of Rome, Italy

IAC-18.C2.8.2
DEVELOPING TITANIUM DIOXIDE-GRAPHENE METAMATERIALS FOR NEXT GENERATION THERMOELECTRICS
Elizabeth Barrios, University of Central Florida (UCF), United States

IAC-18.C2.8.3
DIAMOND AS A QUANTUM SENSOR FOR SPACE EXPLORATION
Jaroslav Hruby, Institute for Material Research (IMO), IMOMEC, IMEC , Belgium

IAC-18.C2.8.4
EMERGING 2D-NANOMATERIALS FOR ADDITIVE MANUFACTURING OF SPACE-GRADE HYBRID ELECTRONICS
Twinkle Pandhi, Boise State University (BSU), United States

IAC-18.C2.8.5
GRAPHENE LOOP HEAT PIPES IN SPACE
Marco MOLINA, Leonardo Spa, Italy

IAC-18.C2.8.6
IDENTIFICATION OF THE MATHEMATICAL MODEL FOR NON-EQUILIBRIUM THERMOCHEMICAL KINETICS OF DESTRUCTIVE POLYMERIC MATERIAL FOR DESCENT VEHICLES THERMAL PROTECTION
Alena V. Morzhukhina, Moscow Aviation Institute (National Research University, MAI), Russian Federation

IAC-18.C2.8.7
LONG TERM STORAGE ISSUES FOR NDFEB MAGNETS AND DEVELOPMENT OF NEW MAGNETIC MATERIALS
Lucia Pigliaru, ESA - European Space Agency, The Netherlands

IAC-18.C2.8.8
MANUFACTURING OF A LIGHTLY LOADED REUSABLE THERMAL INTERFACE FOR SPACE APPLICATIONS
Jens Riesselmann, Technische Universität Berlin, Germany

IAC-18.C2.8.9
NANO MATERIALS, SPECIALISED TECHNOLOGIES AND EQUIPMENT FOR PRODUCTION FLEXIBLE HYBRID SYSTEM WITH HIGH ENERGY LI BATTERIES AND PV MODULES FOR SPACE APPLICATIONS.
Elena Shembel, , United States

IAC-18.C2.8.10 (non-confirmed)
MULTIDISCIPLINARY DESIGN AND SIMULATION OF A 3D PRINTED LATTICE COLD PLATE
Carlo Giovanni Ferro, Politecnico di Torino, Italy

IAC-18.C2.8.11
ONE-STEP METHOD TO SYNTHESIZE TUNGSTEN NANOFLUIDS IN VARIABLE GRAVITY
Julia Tielke, ZARM, University of Bremen, Germany

IAC-18.C2.8.12
A NEWLY DEVELOPED RADIATION HARDENED NOC-MESHING MULTICORE DIGITAL SIGNAL PROCESSOR FOR HIGH AEROSPACE COMPUTING PERFORMANCE
Hui Cao, Xi'an Microelectronics Technology Institute, China Academy of Space Electronics Technology (CASET), China Aerospace Science and Technology Corporation (CASC), China

IAC-18.C2.8.13
DEVELOPMENT AND ANALYSIS OF A NEW ALLOY CANDIDATE FOR LARES 2 SATELLITE
Antonio Paolozzi, Sapienza University of Rome, Italy

C2.9. Advancements in Materials Applications and Rapid Prototyping

October 5 2018, 13:30 — ÖVB 2

Co-Chair(s): *Behnam Ashrafi , National Research Council, Canada; Giuliano Marino , CIRA Italian Aerospace Research Centre, Italy;*
Rapporteur(s): *James Tucker , Southern Research Institute, United States;*

IAC-18.C2.9.1
ROBOTIC 3D DEPOSITION OF IMPREGNATED CARBON ROVINGS WITH GRADIENT PROPERTIES FOR PRIMARY STRUCTURES
Pascal Mindermann, Institute for Textile and Fiber Technologies (ITFT), University of Stuttgart, Germany

IAC-18.C2.9.2
NASA ADDITIVE MANUFACTURING INITIATIVES FOR DEEP SPACE HUMAN EXPLORATION
Raymond "Corky" Clinton, NASA MSFC, United States

IAC-18.C2.9.3
DESIGN FOR ADDITIVE MANUFACTURING IN THE CONTEXT OF CUBESAT PRIMARY STRUCTURES
Scott Walker, University of Southampton, United Kingdom

IAC-18.C2.9.4
DESIGN AND TESTING OF ADDITIVELY MANUFACTURED LATTICE STRUCTURES
Tim Lewis, Airbus DS GmbH, Germany

IAC-18.C2.9.5
OHB INITIATIVES IN DEVELOPMENT OF ADDITIVE MANUFACTURING TECHNOLOGY FOR OPTO-MECHANICAL AND MECHATRONIC SPACE SYSTEMS
Markus Thiel, OHB System AG - Oberpfaffenhofen, Germany

IAC-18.C2.9.6
SELECTIVE LASER MELTING OF A 1U CUBESAT STRUCTURE. DESIGN FOR ADDITIVE MANUFACTURING AND ASSEMBLY.
Valerio Cardini, Sapienza University of Rome, Italy

IAC-18.C2.9.7
DESIGN, ANALYSIS, AND VALIDATION OF A THREE-PIECE COMPOSITE ROCKET FUSELAGE MANUFACTURED BY AUTOMATED BY AUTOMATED FIBER PLACEMENT.
Oleg Khalimonov, Concordia University, Canada

IAC-18.C2.9.8
STRUCTURAL ANALYSIS OF 3D PRINTED A LATTICE STRUCTURE FOR LUNAR LANDER FOOTPADS
Andrea Mazza, Politecnico di Torino, Italy

IAC-18.C2.9.9
INFLUENCE OF SPATIAL ORIENTATION ON PROPERTIES OF 3D PRINTED PEEK PARTS AND THEIR DESIGN ADAPTATION
Anna Daurskikh, Sonaca Space GmbH, Germany

IAC-18.C2.9.11
NONLINEAR FINITE ELEMENT ANALYSIS OF THE CRACK PROPAGATION IN FDM SAMPLES
Federico Cecchini, University of Rome "Tor Vergata", Italy

IAC-18.C2.9.12
ADDITIVE BIOMANUFACTURING FOR SCALABLE CONSTRUCTION IN SPACE
Jessica Snyder, USRA / NASA Ames Research Center, United States

IAC-18.C2.9.13 (non-confirmed)
RESEARCH ON MICROSATELLITE CARBONFIBER-STRUCTURE FORMING TECHNOLOGY BY CONTINUOUS FIBER 3D PRINTING
Liu Dali, Aerospace System Engineering Shanghai, China

C3. IAF SPACE POWER SYMPOSIUM

Coordinator(s): *Koji Tanaka , Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan; Ming Li , China Academy of Space Technology (CAST), China;*

C3.1. Solar Power Satellite

October 1 2018, 15:00 — CCB Bergen

Co-Chair(s): *John C. Mankins , ARTEMIS Innovation Management Solutions, LLC, United States; Ming Li , China Academy of Space Technology (CAST), China;*
Rapporteur(s): *Koji Tanaka , Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan; Leopold Summerer , European Space Agency (ESA), The Netherlands;*

IAC-18.C3.1.1
KEYNOTE: FIFTY YEARS OF SPACE SOLAR POWER
John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States

IAC-18.C3.1.3
HARVEST OF SPACE SOLAR POWER
Anuhya Sirobhushanam, University of Petroleum and Energy Studies, India

IAC-18.C3.1.4
CASSIOPEIA – A NEW PARADIGM FOR SPACE SOLAR POWER
Ian Cash, International Electric Company (IECL), United Kingdom

IAC-18.C3.1.5
HIGH POWER ELECTRIC GENERATION AND WPT DEMONSTRATION IN SPACE FOR SPS
Xinbin Hou, CAST, China

IAC-18.C3.1.7
THE CONSTRUCTION METHOD OF A 30-M-CLASS LARGE PLANAR ANTENNA FOR SPACE SOLAR POWER SYSTEMS
Daisuke Joudoi, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.C3.1.8
ASSEMBLY SEQUENCE PLANNING OF THE SOLAR POWER SATELLITE
Shunan Wu, Dalian University of Technology, China

IAC-18.C3.1.9
HONEYMOON ON PROXIMA B, ENGAGEMENT OF STARSHOT AND SBPP IDEAS
Omid Shekoofa, Satellite Research Institute, Iranian Space Research Center, Iran

IAC-18.C3.1.10
NEW OPTIMIZATION METHOD FOR SPS-ALPHA MARK-II BASED ON IMPROVED ACO ALGORITHM
Rui Wang, Northwestern Polytechnical University, China

IAC-18.C3.1.11
DEVELOPMENT OF AN RFID SYSTEM FOR SPS-ALPHA
John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States

C3.2. Wireless Power Transmission Technologies and Application

October 2 2018, 09:45 — CCB Bergen

Co-Chair(s): *Ming Li , China Academy of Space Technology (CAST), China; Nobuyuki Kaya , Kobe University, Japan;*
Rapporteur(s): *Haroon B. Oqab , Space Canada Corporation, Canada; Massimiliano Vasile , University of Strathclyde, United Kingdom;*

IAC-18.C3.2.1
IDENTIFYING SPECTRUM FOR USE IN LONG-DISTANCE WIRELESS POWER TRANSMISSION
John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States

IAC-18.C3.2.2
ULTRA MICROGRAVITY PLATFORM WIRELESS POWER TRANSFER WITH IMPROVED EFFICIENCY BASED ON TRANSFORM OPTICS AND METAMATERIALS
Liangyu Bai, Technology and Engineering Center for Space Utilization, China

IAC-18.C3.2.4
CHALLENGES OF SPACE POWER BEAMING: FORGING PRODUCTION SERVICES FROM THE TECHNOLOGY DEVELOPMENT TRADE SPACE
Gary Barnhard, XISP-Inc, United States

IAC-18.C3.2.5
DESIGN, DEVELOP, ADVANCED FUTURE AUTONOMOUS FLEET OF ROBOTIC ROVERS WITH ARTIFICIAL INTELLIGENCE SOFTWARE TO TERRAFORM THE LUNAR CRATER TO BUILD SOPHISTICATED HELIOSTATS
SANDYA RAO, , India

IAC-18.C3.2.7
BRUSHLESS SLIP RING WITH A LONG ROTATING AXIS TO TRANSFER A LARGE AMOUNT OF POWER
Tadashi Takano, Nihon University, Japan

IAC-18.C3.2.8
THE ROAD MAP TOWARD THE SSPS REALIZATION AND APPLICATION OF ITS TECHNOLOGY.
Shoichiro Mihara, Japan Space Systems, Japan

IAC-18.C3.2.9
KEYNOTE: WIRELESS POWER TRANSPORTATION WORLD RESEARCH CENTER – PURPOSE AND OPERATION
Guy Pignolet, Science Sainte Rose, La Reunion

C3.3. Advanced Space Power Technologies

October 3 2018, 14:45 — ZARM 4

Co-Chair(s): *Gary Pearce Bamhard , Xtraordinary Innovative Space Partnerships, Inc., United States; Matthew Perren , Airbus Defence & Space, United Kingdom;*
Rapporteur(s): *Koji Tanaka , Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan; Lee Mason, National Aeronautics and Space Administration (NASA), Glenn Research Center, United States;*

IAC-18.C3.3.1
A NEW METHOD FOR LEO BATTERY AGING EVALUATION BASED ON TELEMETRY ANALYSIS
Andrea Falconi, Sapienza University of Rome, Italy

IAC-18.C3.3.2
ALL-SOLID-STATE LITHIUM-ION BATTERIES TOWARD OPERATION IN LOW-TEMPERATURE MARTIAN ENVIRONMENT
Emily Hitz, National Aeronautics and Space Administration (NASA), Langley Research Center, United States

IAC-18.C3.3.4
STATE ESTIMATION OF LITHIUM-ION BATTERIES IN AEROSPACE
Birger Horstmann, German Aerospace Center (DLR), Germany

IAC-18.C3.3.5
AN ENERGY MANAGEMENT APPROACH FOR SATELLITES
Tobias Posielek, German Aerospace Center (DLR), Germany

IAC-18.C3.3.6
THE REIMEI LI-ION BATTERIES AFTER MORE THAN 12 YEARS OF OPERATION
Omar Mendoza, Japan Aerospace Exploration Agency (JAXA), ISAS, Japan

IAC-18.C3.3.7
INTEGRATION OF ENERGY STORAGE FUNCTIONALITIES INTO FIBER REINFORCED SPACECRAFT STRUCTURES
Benjamin Grzesik, Technische Universität Braunschweig, Germany

IAC-18.C3.3.8
THEORETICAL STUDY OF THE OPEN CIRCUIT VOLTAGE DECAY ON ORGANIC PHOTOVOLTAIC (OPV) SOLAR CELLS BASED ON SPACE RADIATION IONIZING DAMAGE.
Yair Israel Piña López, Universidad Nacional Autónoma de México, Mexico

IAC-18.C3.3.10
DESIGN OF EMI FILTER APPLIED FOR HIGH-POWER SAR DC/DC CONVERTER
Zhipo Ji, Beijing Spacecrafts, China Academy of Space Technology (CAST), China, China

IAC-18.C3.3.11
ENERGY DISTRIBUTION SYSTEM ON A MODULAR SATELLITE
Anja Kohfeldt, Technische Universität Berlin, Germany

IAC-18.C3.3.12
RESEARCH ON INTELLIGENT AUTONOMOUS MANAGEMENT ARCHITECTURE OF SPACECRAFT POWER SYSTEM
JianWu Zhao, Institute of Telecommunication Satellite, China Academy of Space Technology (CAST), China

IAC-18.C3.3.13
INTELLIGENT SURGE CURRENT SUPPRESSION WITH SMALL SOLID-STATE POWER CONTROLLER
Zhihao Zhang, Technology and Engineering Center for Space Utilization, Chinese Academy of Sciences., China

C3.4. Space Power System for Ambitious Missions

October 4 2018, 14:45 — CCB Danzig

Co-Chair(s): *Massimiliano Vasile , University of Strathclyde, United Kingdom; Shoichiro Mihara , Japan Space Systems, Japan;*
Rapporteur(s): *Koji Tanaka , Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan; Xinbin Hou, CAST, China;*

IAC-18.C3.4.2
ON-ORBIT FLIGHT TESTING OF THE ROLL-OUT SOLAR ARRAY
Matthew Chamberlain, National Aeronautics and Space Administration (NASA), United States

IAC-18.C3.4.3
GOSOLAR – A GOSSAMER SOLAR ARRAY CONCEPT FOR HIGH POWER SPACECRAFT APPLICATIONS USING FLEXIBLE THIN-FILM PHOTOVOLTAICS
Tom Sproewitz, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.C3.4.4
PHOTOVOLTAIC ASSEMBLY FOR JUICE
Marco MOLINA, Leonardo Spa, Italy

IAC-18.C3.4.5
DEVELOPMENT AND PROSPECTS FOR THE SPACE APPLICATION OF CDTE THIN FILM SOLAR CELL TECHNOLOGY
Craig Underwood, Surrey Space Centre, University of Surrey, United Kingdom

IAC-18.C3.4.6
DEVELOPMENT OF 1KW HIGH POWER X-BAND SAR INSTALLED ON SMALL SATELLITE FOR ON-DEMAND OBSERVATION
Koji Tanaka, Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan

IAC-18.C3.4.7
MARS HABITAT POWER CONSUMPTION CONSTRAINTS, PRIORITIZATION, AND OPTIMIZATION
Simon Engler, University of Hawaii, United States

IAC-18.C3.4.8
SPACE BASED ELECTRICITY GENERATION USING SPACE RESOURCES FOR FUTURE SPACE COLONIES AND MISSIONS
Shivangi Chauhan, University of Petroleum and Energy Studies, India

IAC-18.C3.4.9
STAGE-WISE ANALYSIS OF POWER PRODUCTION FOR ESTABLISHING PERMANENT HUMAN SETTLEMENT ON MARS
Taavishe Gupta, University of Petroleum and Energy Studies, India

IAC-18.C3.4.10
SOLAR POWER SATELLITES FOR LUNAR EXPLORATION
Rohan Ramasamy, ESA - European Space Agency, Netherlands Antilles

IAC-18.C3.4.11
THE ELECTRICAL POWER SUBSYSTEM OF THE ESA MISSION TO JUPITER
Emilio Lapeña, Airbus Defence and Space, Spain

IAC-18.C3.4.12 (non-confirmed)
SOLAR PANEL DESIGN ASPECTS AND CHALLENGES FOR A LUNAR MISSION
Mannika Garg, Team Indus, Axiom Research Labs Pvt. Ltd., India

C3.5-C4.7. Joint Session on Advanced and Nuclear Power and Propulsion Systems

October 5 2018, 09:45 — ZARM 5

Co-Chair(s): *Jerome Breteau , European Space Agency (ESA), France; Leopold Summerer , European Space Agency (ESA), The Netherlands;*
Rapporteur(s): *Changjin Lee , Konkuk University, Korea, Republic of; Constanze Syring , ArianeGroup, Germany; Vito Salvatore , CIRA Italian Aerospace Research Center, Capua, Italy;*

IAC-18.C3.5-C4.7.1
PLANS AND CONCEPTS FOR A NEW GENERATION OF RTGS FOR PLANETARY SCIENCE MISSIONS
David Woerner, Jet Propulsion Laboratory - California Institute of Technology, United States

IAC-18.C3.5-C4.7.2
CONCEPTUAL DESIGN AND ECONOMIC STUDY FOR A COMPACT NUCLEAR REACTOR TO ENABLE FUTURE HUMAN SPACE EXPLORATION
Pierre EVELLIN, , France

IAC-18.C3.5-C4.7.3
PRELIMINARY NOZZLE DESIGN FOR A NUCLEAR THERMAL PROPULSION TEST MISSION
Nick Salamon, The Ohio State University College of Engineering, United States

IAC-18.C3.5-C4.7.4 (non-confirmed)
SYSTEM INVESTIGATION AND PARAMETRIC ANALYSIS OF A 110KN THRUST FOR NUCLEAR THERMAL ENGINE(NTE)
Haoze Wang, Beijing Aerospace Propulsion Institute, China

IAC-18.C3.5-C4.7.5
SPACEDRIVE – THRUST BALANCE DEVELOPMENT AND FIRST MEASUREMENTS OF MACH-EFFECT AND EMDRIVE THRUSTERS
Martin Tajmar, TU Dresden, Germany

IAC-18.C3.5-C4.7.8 (non-confirmed)
SOLAR THERMAL POWER PROPULSION SYSTEM FOR SHORT LEO-TO-GEO MISSION
Sergey Finogenov, Moscow Aviation Institute (National Research University, MAI), Russian Federation

IAC-18.C3.5-C4.7.9
CRYOGENIC PROPELLANT STORAGE FOR HIGH POWER PLASMA SPACE PROPULSION
Thierry Wiertz, Air Liquide, France

IAC-18.C3.5-C4.7.10
MISSION ARCHITECTURE FOR A PROOF-OF-CONCEPT NUCLEAR THERMAL PROPULSION INTERPLANETARY MISSION
Zachary Strimbu, The Ohio State University College of Engineering, United States

IAC-18.C3.5-C4.7.11
THE NUMERICAL ANALYSIS OF THE THRUST CHARACTERISTIC OF THE MAGNETO PLASMA SAIL IN THE NON-UNIFORM MAGNETIC REYNOLDS NUMBER CONDITION
Hiroyuki Arai, Shizuoka University, Japan

IAC-18.C3.5-C4.7.12
BREAKTHROUGH OF INERTIAL ELECTROSTATIC CONFINEMENT CONCEPT FOR ADVANCED SPACE PROPULSION
Yung-An Chan, Institute of Space Systems, Universität Stuttgart, Germany

IAC-18.C3.5-C4.7.13
THE IMPACT OF NUCLEAR PROPULSION ON CISLUNAR STATIONS
Mark Hempsell, The British Interplanetary Society, United Kingdom

C4. IAF SPACE PROPULSION SYMPOSIUM

Coordinator(s): *Christophe Bonhomme , Centre National d'Etudes Spatiales (CNES), France; Giorgio Saccoccia, European Space Agency (ESA), The Netherlands; Helen Webber, Reaction Engines Ltd., United Kingdom; Riheng Zheng , China Aerospace Science & Industry Corporation (CASIC), China; Toru Shimada , Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan;*

C4.1. Propulsion System (1)

October 1 2018, 15:00 — ZARM 5

Co-Chair(s): *Christophe Bonhomme , Centre National d'Etudes Spatiales (CNES), France; Patrick Danous , Snecma, France;*
Rapporteur(s): *Akira Ogawara , Mitsubishi Heavy Industries, Ltd., Japan; Ozan Kara , Space Generation Advisory Council (SGAC), Turkey;*

IAC-18.C4.1.1 (non-confirmed)
KEYNOTE: THE EUROPEAN WAY FOR LIQUID PROPULSION – HYDROGEN / METHANE FAMILY CONCEPT
Gerald Hagemann, ArianeGroup, Germany

IAC-18.C4.1.2
PROMETHEUS: PRECURSOR OF NEW LOW-COST ROCKET ENGINE FAMILY
Pamela SIMONTACCHI, ArianeGroup SAS, France

IAC-18.C4.1.4
VINCI UPPER STAGE ENGINE DEVELOPMENT, TEST, QUALIFICATION, AND INDUSTRIALISATION STATUS FOR ARIANE 6
Dietrich Haeseler, ArianeGroup, Germany

IAC-18.C4.1.5
RESULT OF PRELIMINARY DESIGN AND DEVELOPMENT STATUS OF LE-9 ENGINE
Akihide Kurosu, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.C4.1.6
ANALYSIS AND VERIFICATION OF THE SPACEIL LUNAR LANDER PROPULSION SYSTEM DURING DEVELOPMENT AND BREADBOARD TESTING
Avichai Elimelech, Israel Aerospace Industries Ltd., Israel

IAC-18.C4.1.7
PROGRESS IN 30KN LOX/METHANE EXPANDER CYCLE ENGINE
Shengqing Cheng, Beijing Aerospace Propulsion Institute, China

IAC-18.C4.1.8
FLPP ETID: HOT-FIRE TEST RESULTS OF FUTURE EUROPEAN EXPANDER TECHNOLOGIES
Thomas Fuhrmann, ArianeGroup, Germany

IAC-18.C4.1.9 (non-confirmed)
LEADING PROGRESS OF CHEMICAL ROCKET ENGINES IN CHINA
Fashu Shi, CALT,CASC, China

IAC-18.C4.1.10
MODELLING AND CORRELATION OF CRYOGENIC ORBITAL STAGES WITH FOCUS ON PROPELLANT TANKS
Danail Nedyalkov-Höfkes, ArianeGroup, Germany

IAC-18.C4.1.12
QUALIFICATION APPROACH FOR MODIFICATIONS OF LIQUID PROPULSION SYSTEMS
DUSSOLLIER Gabriel, ArianeGroup SAS, France

IAC-18.C4.1.13
CURRENT STATUS OF THE LUMEN LOX/LNG ROCKET ENGINE DEMONSTRATOR
Jan Deeken, DLR (German Aerospace Center), Germany

IAC-18.C4.1.14
DAMAGE MITIGATING ANALYSIS FOR LIQUID ROCKET ENGINE OF NEXT REUSABLE LAUNCH VEHICLE
Ren Jiawan, , China

IAC-18.C4.1.15 (non-confirmed)
LATEST PROGRESS OF HIGH PERFORMANCE LIQUID APOGEE ENGINE FOR SATELLITES IN SISP
Changguo Liu, Shanghai Institute of Space Propulsion, China

IAC-18.C4.1.16 (non-confirmed)
STATUS OF THE EVALUATION OF THE VINCI ROCKET ENGINE OXYGEN CHILL-DOWN WITH COMETE THERMAL-HYDRAULIC SOFTWARE.
Charles-Hubert Bachelet, ArianeGroup, France

C4.2. Propulsion System (2)

October 2 2018, 09:45 — ZARM 5

Co-Chair(s): *Stéphane Henry , ArianeGroup, France; Toru Shimada , Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan;*
Rapporteur(s): *Yen-Sen Chen , American Institute of Aeronautics and Astronautics (AIAA), United States;*

IAC-18.C4.2.1 (non-confirmed)
KEYNOTE: RECENT DEVELOPMENTS IN SOLID PROPULSION
Jean-Francois Guery, ArianeGroup, France

IAC-18.C4.2.2
FLIGHT RESULTS OF SOLID PROPULSION SYSTEM FOR EPSILON LAUNCH VEHICLE FROM THE THIRD FLIGHT
Koki Kitagawa, Japan Aerospace Exploration Agency (JAXA), ISAS, Japan

IAC-18.C4.2.3
RESEARCH ON THERMOCHEMICAL REACTION MECHANISM AND MODEL OF EPDM INSULATOR UNDER SLAG DEPOSITION CONDITION
Yiwen Guan, Northwestern Polytechnical University NPU, China

IAC-18.C4.2.4
ASSESSMENT OF THE FLIGHT EXPERIMENTS OF A MULTIFUNCTION HYBRID SOUNDING ROCKET
Yen-Sen Chen, American Institute of Aeronautics and Astronautics (AIAA), Taiwan, China

IAC-18.C4.2.5
TECHNOLOGY DEVELOPMENT FOR A POTENTIAL HYBRID MARS ASCENT VEHICLE
Ashley Karp, Jet Propulsion Laboratory - California Institute of Technology, United States

IAC-18.C4.2.6
EFFECT OF PRESSURE LOSS DEVICES ON THE PERFORMANCE OF HYBRID ROCKET SYSTEMS
Arif Karabeyoglu, Koc University, United States

IAC-18.C4.2.7
A STUDY ON THROTTLING, ANTI-O/F SHIFT OPERATION AND LOX VAPORIZATION FOR HYBRID ROCKET ENGINE WITH MULTI-SECTION SWIRL INJECTION METHOD
Shigeru Aso, Kyushu University, Japan

IAC-18.C4.2.8
CHARACTERIZATION OF REGRESSION RATE AND COMBUSTION PROCESS IN A HIGH-PRESSURE 2D HYBRID ROCKET ENGINE WITH OPTICAL ACCESS
Georg Poppe, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.C4.2.9
THE PRELIMINARY STUDY OF SEVERITY LEVEL OF STRUCTURAL DISCONTINUITIES IN PARAFFIN GRAIN OF HYBRID PROPELLANT ROCKET
Artem Andrianov, University of Brasilia, Brazil

IAC-18.C4.2.10
EXPERIMENTAL INVESTIGATION OF THE FEED SYSTEM INSTABILITIES IN HYBRID ROCKET MOTORS
Artur Bertoldi, University of Brasilia, Brazil

IAC-18.C4.2.11
VALIDATION AGAINST EXPERIMENTAL DATA OF NUMERICAL PREDICTION OF CHARACTERISTICS OF COMBUSTION INSTABILITY IN HYBRID ROCKET MOTORS
Goutham Karthikeyan, Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency, Japan

C4.3. Propulsion Technology (1)

October 3 2018, 09:45 — ZARM 5

Co-Chair(s): *Angelo Cervone , Delft University of Technology (TU Delft), The Netherlands; Didier Boury , ArianeGroup SAS, France;*
Rapporteur(s): *Changjin Lee , Konkuk University, Korea, Republic of; John Harlow , Aerojet Rocketdyne, United Kingdom;*

IAC-18.C4.3.2
Carbon-carbon Nozzle Extension Assembly for the RL10 Engines
Thierry Pichon, ArianeGroup, France

IAC-18.C4.3.3
ADDITIVE MANUFACTURING DEVELOPMENT FOR LE-9 ENGINE
Akira Ogawara, Mitsubishi Heavy Industries, Ltd., Japan

IAC-18.C4.3.4
INFLUENCES OF STRUCTURAL PARAMETERS ON ATOMIZATION AND COMBUSTION PERFORMANCES OF LOX/METHANE PINTLE INJECTOR
Shen Chibing, National University of Defense Technology, China

IAC-18.C4.3.6
HYBRID ROCKETS WITH NOZZLES IN ULTRA-HIGH-TEMPERATURE CERAMIC COMPOSITES
Giuseppe Di Martino, University of Naples "Federico II", Italy

IAC-18.C4.3.7
COMPARISON OF SIMULATION AND EXPERIMENTAL RESULTS FOR FUNCTIONAL VERIFICATION OF A PROPELLANT MASS-FLOW REGULATION DEVICE
Samuel Webster, ArianeGroup, Germany

IAC-18.C4.3.8
Development and Qualification of Turbines for the Vinci Upper Stage Engine for Ariane 6
Li Forsberg, GKN Aerospace Engine Systems, Sweden

IAC-18.C4.3.9
STATUS OF THE TURBOPUMP DEVELOPMENT IN THE LUMEN PROJECT
Tobias Traudt, DLR (German Aerospace Center), Germany

IAC-18.C4.3.10
SYSTEMS ADVANTAGES OF ELECTRIC PUMP FED UPPER STAGE HYBRID ROCKET
Kaan Gegeoglu, Koc University, Turkey

IAC-18.C4.3.11
ELECTRICAL PRESSURIZATION CONCEPT FOR THE ORION-ESM PROPULSION SYSTEM
Jan-Hendrik Meiss, Airbus DS GmbH, Germany

IAC-18.C4.3.12
DEVELOPMENT STATUS OF 500 N - CLASS HTP/TMPDA BI-PROPELLANT ROCKET ENGINE
Pawel Surmacz, Institute of Aviation, Poland

IAC-18.C4.3.13
DEVELOPMENT OF 10N MARK-2 THRUSTER FOR SPACECRAFT APPLICATIONS
ARUN KUMAR P, Liquid Propulsion Systems Centre(LPSC), Indian Space Research Organization (ISRO), India

IAC-18.C4.3.14 (non-confirmed)
INVESTIGATION OF NEW IGNITION SYSTEMS FOR FUTURE LAUNCHER APPLICATION
Laurent Gomet, ArianeGroup, France

IAC-18.C4.3.15
MODAL PROPELLANT GAUGING: HIGH-RESOLUTION AND NON-INVASIVE GAUGING OF BOTH SETTLED AND UNSETTLED LIQUIDS IN REDUCED GRAVITY.
Kevin Crosby, Carthage College, United States

C4.4. Electric Propulsion

October 3 2018, 14:45 — ZARM 5

Co-Chair(s): *Garri A. Popov , Research Institute of Applied Mechanics and Electrodynamics (RIAME), MAI, Russian Federation; Norbert Puettmann , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Nicoletta Wagner , Airbus DS GmbH, Germany; Vanessa Vial , Safran Aircraft Engines, France;*

IAC-18.C4.4.1
ELECTRIC PROPULSION RESEARCH AND DEVELOPMENT AT NASA
George Schmidt, NASA Glenn Research Center, United States

IAC-18.C4.4.2
STATUS OF ADVANCED ELECTRIC PROPULSION SYSTEMS FOR EXPLORATION MISSIONS
R. Joseph Cassady, Aerojet Rocketdyne, United States

IAC-18.C4.4.3
IN-FLIGHT OPERATION OF THE HAYABUSA2 ION ENGINE SYSTEM ON ITS WAY TO RENDEZVOUS WITH ASTEROID 162173 RYUGU
Kazutaka Nishiyama, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.C4.4.4
STATUS OF HIGH-POWER ION THRUSTER AND FLOW CONTROL UNIT QUALIFICATION
Alexander Lovtsov, SSC Keldysh Research Centre, Russian Federation

IAC-18.C4.4.5
CHALLENGES OF TRANSFERRING THE HEMP-THRUSTER BASED ION PROPULSION SYSTEM FROM HISPASAT TO HEINRICH HERTZ
Thomas Wolf, DLR (German Aerospace Center), Germany

IAC-18.C4.4.6
THE STRATEGIC RESEARCH CLUSTERS ON SPACE ELECTRIC PROPULSION OF THE EUROPEAN UNION'S HORIZON 2020
Jorge LOPEZ REIG, CDTI (Centre for the development of Industrial Technology), Spain

IAC-18.C4.4.7
FUTURE ELECTRIC PROPULSION NEEDS DEDUCED FROM LAUNCHER AND MISSION CONSTRAINTS
Birk Wollenhaupt, OHB System AG-Bremen, Germany

IAC-18.C4.4.8
HT20K HALL THRUSTER DEVELOPMENT STATUS
Tommaso Andreussi, Sitael Spa, Italy

IAC-18.C4.4.9
PPS®X00 HALL THRUSTER DEVELOPMENT AT SAFRAN
Julien VAUDOLON, Safran Aircraft Engines, France

IAC-18.C4.4.10
SITAEL LOW POWER HALL EFFECT PROPULSION SYSTEMS FOR SMALL SATELLITES
Tommaso Misuri, Sitael Spa, Italy

IAC-18.C4.4.11
DEVELOPMENT OF ELECTRIC PROPULSION THRUSTERS FOR SMALL SPACECRAFT AT RIAME MAI
ALEKSANDR BOGATYY, Research Institute of Applied Mechanics and Electrodynamics (RIAME), MAI, Russian Federation

IAC-18.C4.4.12
PPU NEW DEVELOPMENTS FOR HET, GIT AND NEW SPACE
Fernando Pinto, Airbus Defence and Space, Spain

IAC-18.C4.4.13
DESTRUCTIVE EVALUATION OF A XENON HOLLOW CATHODE AFTER A 15,000 HOUR LIFE TEST
JIE FENG, Lanzhou Institute of Physics, Electric Propulsion Department, China

IAC-18.C4.4.14
PROGRESS OF RESEARCH ACTIVITIES ON ELECTRIC PROPULSION AT CIRA
Francesco Battista, CIRA Italian Aerospace Research Centre, Italy

IAC-18.C4.4.15
DEVELOPMENT OF GALLIUM AND INDIUM MEMS FEEP THRUSTERS USING GLASS CAPILLARIES
Martin Tajmar, TU Dresden, Germany

C4.5. Propulsion Technology (2)

October 4 2018, 09:45 — ZARM 5

Co-Chair(s): *Jacques Gigou , European Space Agency (ESA), France; Walter Zinner , ArianeGroup, Germany;*
Rapporteur(s): *Max Calabro , The Inner Arch, France;*

IAC-18.C4.5.2
Catalyst Support Development for High Performance Green Monopropellant Thruster
YeonSoo Jung, Korea Advanced Institute of Science and Technology (KAIST), Korea, Republic of

IAC-18.C4.5.3
COMPARISON OF HTP CATALYST PERFORMANCE FOR DIFFERENT INTERNAL MONOLITH STRUCTURES
Robert-Jan Koopmans, , Austria

IAC-18.C4.5.4
DYNAMIC THRESOLD DETECTION BASED ABORT SCHEME FOR SAFEGAURDING CRYOGENIC TURBO PUMPS DURING CAVITATION
VINOD P, Indian Space Research Organization (ISRO), India

IAC-18.C4.5.6
EXPERIMENTAL INVESTIGATION OF STRATIFICATION WITH LIQUID NITROGEN IN A LARGE SCALE CRYOGENIC TANK DEMONSTRATOR
Anton Stark, DLR (German Aerospace Center), Germany

IAC-18.C4.5.7
TECHNOLOGICAL ADVANCEMENTS IN THE HYPROB PROJECT - DEMONSTRATORS DEVELOPMENT LINE
Francesco Battista, CIRA Italian Aerospace Research Centre, Italy

IAC-18.C4.5.8
DEVELOPMENT OF VALVES FOR THE ORION ESM PROPULSION SUBSYSTEM MARK II
Artur Koop, Airbus DS GmbH, Germany

IAC-18.C4.5.9
NUMERICAL MODELLING OF SUPERCRITICAL COMBUSTION IN LOX-METHANE MULTI-ELEMENT CHAMBER
Abhishek Sharma, Indian Space Research Organization (ISRO), India

IAC-18.C4.5.10
LIQUID ROCKET ENGINE DESIGN FOR ADDITIVE MANUFACTURING
Jan Fessl, University of Southern California, United States

IAC-18.C4.5.12
PRELIMINARY TEST ON MAGNESIUM-BASED ADDITIVE DOPED PARAFFIN FUEL FOR HYBRID ROCKET ENGINE
Dahae LEE, Université Libre de Bruxelles, Belgium

IAC-18.C4.5.13
INVESTIGATIONS OF VARIABLE THRUST LIQUID OXYGEN/ KEROSENE ENGINE USING A PINTLE INJECTOR
Nanjia Yu, Beijing University of Aeronautics and Astronautics (BUAA), China

IAC-18.C4.5.15
SLOSHING BEHAVIOR OF LIQUID NITROGEN IN A LARGE SCALE CRYOGENIC TANK DEMONSTRATOR
Nicolas Darkow, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Institute of Space Systems, Germany

IAC-18.C4.5.16
HOW TO STEER AN AEROSPIKE
Christian Bach, Dresden University of Technology (DUT) / Technische Universität Dresden, Germany

IAC-18.C4.5.17
TESTING CAPABILITIES FOR HEAT TRANSFER IN SIMULATIVE LIQUID ROCKET ENGINE COOLING CHANNELS AT THE JOHNS HOPKINS UNIVERSITY
Benjamin Hill-Lam, , United States

C4.6. New Missions Enabled by New Propulsion Technology and Systems

October 4 2018, 14:45 — ZARM 5

Co-Chair(s): *Giorgio Saccoccia , European Space Agency (ESA), The Netherlands; Sabrina Corpino , Politecnico di Torino, Italy;*
Rapporteur(s): *Alexander Lovtsov , SSC Keldysh Research Centre, Russian Federation; Elena Toson , , Italy;*

IAC-18.C4.6.1 (non-confirmed)
CONTROLLED SUBLIMATING SOLID PROPELLANT-TANK FOR NANO-AND PICO-SATELLITE APPLICATIONS
Didier Maxence, Delft University of Technology (TU Delft), The Netherlands

IAC-18.C4.6.2
CHEMICAL PROPULSION SYSTEM DESIGN FOR A 16U INTERPLANETARY CUBESAT
Karthik Venkatesh Mani, Politecnico di Milano, Italy

IAC-18.C4.6.3
IONSAT: CHALLENGING THE ATMOSPHERIC DRAG WITH A 6U NANOSATELLITE.
Clément Pellouin, Ecole Polytechnique, France

IAC-18.C4.6.4
ADVANCES ON THE INDUCTIVE PLASMA THRUSTER DESIGN FOR AN ATMOSPHERE-BREATHING EP SYSTEM
Francesco Romano, Institute of Space Systems, Universität Stuttgart, Germany

IAC-18.C4.6.6
A 20KW-CLASS HALL EFFECT THRUSTER TO ENHANCE PRESENT AND FUTURE SPACE MISSIONS
Martina Mammarella, Politecnico di Torino, Italy

IAC-18.C4.6.7 (non-confirmed)
CAPTURED COMET NUCLEI AS SPACE RESOURCE FOR INTERPLANETARY FLYING
Alexander Bagrov, Lavochkin Association, Russian Federation

IAC-18.C4.6.8
ANALYSIS OF MANNED MISSIONS ENABLED BY BIMODAL NUCLEAR PROPULSION TECHNOLOGIES
Justin Clark, The Ohio State University College of Engineering, United States

IAC-18.C4.6.9
COMPARATIVE STUDY OF SOLAR ELECTRIC SAIL THRUST MODELING FOR INTERPLANETARY MISSIONS
Harijono Djojodihardjo, , Indonesia

IAC-18.C4.6.10
THE INTERPLANETARY CROSSBOW: TECHNOLOGY AND ARCHITECTURE DESCRIPTION FOR AN INTERPLANETARY LASER-SAIL SYSTEM FOR THE USE OF SMALL PAYLOADS.
Kelvin Long, Initiative for Interstellar Studies, United Kingdom

IAC-18.C4.6.11
ADVANCED PROPULSION SYSTEM FOR SEARCHING EXOPLANETS
Mridul Jain, University of Petroleum and Energy Studies, India

IAC-18.C4.6.12
TRAJECTORY AND CONTROL SYSTEMS DESIGN FOR A HOVERING MESOPAUSE PROBE
Dorian Hargarten, DLR (German Aerospace Center), Germany

IAC-18.C4.6.13
IMPACT OF SOLAR WIND FLUCTUATIONS ON ELECTRIC SAIL TRAJECTORY
Lorenzo Niccolai, University of Pisa, Italy

C4.7-C3.5.Joint Session on Advanced and Nuclear Power and Propulsion Systems

October 5 2018, 09:45 — ZARM 5

Co-Chair(s): *Jerome Breteau , European Space Agency (ESA), France; Leopold Summerer , European Space Agency (ESA), The Netherlands;*
Rapporteur(s): *Changjin Lee , Konkuk University, Korea, Republic of; Constanze Syring , ArianeGroup, Germany; Vito Salvatore , CIRA Italian Aerospace Research Center, Capua, Italy;*

IAC-18.C4.7-C3.5.1
PLANS AND CONCEPTS FOR A NEW GENERATION OF RTGS FOR PLANETARY SCIENCE MISSIONS
David Woerner, Jet Propulsion Laboratory - California Institute of Technology, United States

IAC-18.C4.7-C3.5.2
CONCEPTUAL DESIGN AND ECONOMIC STUDY FOR A COMPACT NUCLEAR REACTOR TO ENABLE FUTURE HUMAN SPACE EXPLORATION
Pierre EVELLIN, , France

IAC-18.C4.7-C3.5.3
PRELIMINARY NOZZLE DESIGN FOR A NUCLEAR THERMAL PROPULSION TEST MISSION
Nick Salamon, The Ohio State University College of Engineering, United States

IAC-18.C4.7-C3.5.4 (non-confirmed)
SYSTEM INVESTIGATION AND PARAMETRIC ANALYSIS OF A 110KN THRUST FOR NUCLEAR THERMAL ENGINE(NTE)
Haoze Wang, Beijing Aerospace Propulsion Institute, China

IAC-18.C4.7-C3.5.5
SPACEDRIVE – THRUST BALANCE DEVELOPMENT AND FIRST MEASUREMENTS OF MACH-EFFECT AND EMDRIVE THRUSTERS
Martin Tajmar, TU Dresden, Germany

IAC-18.C4.7-C3.5.8 (non-confirmed)
SOLAR THERMAL POWER PROPULSION SYSTEM FOR SHORT LEO-TO-GEO MISSION
Sergey Finogenov, Moscow Aviation Institute (National Research University, MAI), Russian Federation

IAC-18.C4.7-C3.5.9
CRYOGENIC PROPELLANT STORAGE FOR HIGH POWER PLASMA SPACE PROPULSION
Thierry Wiertz, Air Liquide, France

IAC-18.C4.7-C3.5.10
MISSION ARCHITECTURE FOR A PROOF-OF-CONCEPT NUCLEAR THERMAL PROPULSION INTERPLANETARY MISSION
Zachary Strimbu, The Ohio State University College of Engineering, United States

IAC-18.C4.7-C3.5.11
THE NUMERICAL ANALYSIS OF THE THRUST CHARACTERISTIC OF THE MAGNETO PLASMA SAIL IN THE NON-UNIFORM MAGNETIC REYNOLDS NUMBER CONDITION
Hiroyuki Arai, Shizuoka University, Japan

IAC-18.C4.7-C3.5.12
BREAKTHROUGH OF INERTIAL ELECTROSTATIC CONFINEMENT CONCEPT FOR ADVANCED SPACE PROPULSION
Yung-An Chan, Institute of Space Systems, Universität Stuttgart, Germany

IAC-18.C4.7-C3.5.13
THE IMPACT OF NUCLEAR PROPULSION ON CISLUNAR STATIONS
Mark Hempsell, The British Interplanetary Society, United Kingdom

C4.8-B4.5A. Joint Session between IAA and IAF for Small Satellite Propulsion Systems

October 5 2018, 13:30 — ZARM 5

Co-Chair(s): *Arnau Pons Lorente , Purdue University, United States; Jeffery Emdee , The Aerospace Corporation, United States;*
Rapporteur(s): *Elena Toson , , Italy; Elizabeth Jens , Jet Propulsion Laboratory - California Institute of Technology, United States;*

IAC-18.C4.8-B4.5A.1 (non-confirmed)
KEYNOTE: CHALLENGES AND OPPORTUNITIES IN SPACE PROPULSION FOR SMALL SATELLITES
Paulo Lozano, MIT, United States

IAC-18.C4.8-B4.5A.2
MAGNETIC ENHANCED PLASMA PROPULSION SYSTEM FOR SMALL-SATELLITES IOD DEVELOPMENT
Marco Manente, , Italy

IAC-18.C4.8-B4.5A.3
FLIGHT MODEL DEVELOPMENT OF THE WATER RESISTOJET PROPULSION SYSTEM FOR DEEP SPACE EXPLORATION BY THE CUBESAT: EQUULEUS
Jun Asakawa, University of Tokyo, Japan

IAC-18.C4.8-B4.5A.4
HYBRID ATTITUDE AND ORBIT CONTROL OF A PICO-SATELLITE USING MAGNETIC TORQUERS AND AN ELECTRIC PROPULSION SYSTEM
Philip Bangert, University Wuerzburg, Germany

IAC-18.C4.8-B4.5A.5
ADVANCED MICRO-PROPULSION BASED ON THE MICRO-CATHODE ARC THRUSTER
Jonathan Kolbeck, George Washington University, United States

IAC-18.C4.8-B4.5A.6
IN-ORBIT MICRO-PROPULSION DEMONSTRATOR FOR PICO-SATELLITE APPLICATIONS
Vidhya Pallichadath, Delft Institute Of Technology (TU Delft), The Netherlands

IAC-18.C4.8-B4.5A.7
DESIGN OF A TEST PLATFORM FOR MINIATURIZED ELECTRIC PROPULSION SYSTEMS
Fabrizio Stesina, Politecnico di Torino, Italy

IAC-18.C4.8-B4.5A.8
NPT30 - A STAND-ALONE ELECTRIC PROPULSION SYSTEM FOR SMALL SATELLITES
Ane Aanesland, ThrustMe, France

IAC-18.C4.8-B4.5A.10
DEVELOPMENT OF A RADIO-FREQUENCY RESONANT-SWITCH POWER SUPPLY FOR RF ION THRUSTERS FOR SMALL SATELLITES
Iana Kharlan, , Russian Federation

IAC-18.C4.8-B4.5A.11
VLM SYSTEM DEVELOPMENT FOR MICRO SATELLITE APPLICATION
Ravi Ranjan, National University of Singapore, Singapore, Republic of

IAC-18.C4.8-B4.5A.12
SMALL SATELLITE LOW COST PROPULSION SYSTEM USING COTS COMPONENTS
Ben Risi, Space Flight Laboratory, University of Toronto, Canada

IAC-18.C4.8-B4.5A.13
CASELESS THROTTLEABLE SOLID MOTOR FOR SMALL SPACECRAFT
Mykhailo Yemets, Oles Honchar Dnipropetrovsk National University, Ukraine

C4.9. Hypersonic Air-breathing and Combined Cycle Propulsion

October 2 2018, 14:45 — ZARM 5

Co-Chair(s): *Helen Webber , Reaction Engines Ltd., United Kingdom; Riheng Zheng , China Aerospace Science & Industry Corporation (CASIC), China;*
Rapporteur(s): *Salvatore Borrelli , CIRA Italian Aerospace Research Centre, Italy;*

IAC-18.C4.9.1
KEYNOTE: ADVANCE OF SCRAMJET OPERATING MODE COMPREHENSION BASED ON SHOCK TUNNEL EXPERIMENTS AND NUMERICAL MODELLING
Klaus Hannemann, DLR, German Aerospace Center, Germany

IAC-18.C4.9.3
AN INTEGRATED TURBOPUMP FEED SYSTEM BASED ON GAS GENERATOR CYCLE FOR RBCC IN MULTIPLE MODES
Hongliang Pan, Northwestern Polytechnical University, China

IAC-18.C4.9.4
FLOW AND THERMAL CHARACTERISTICS IN REGENERATIVE COOLING CHANNELS AROUND CAVITY OF RBCC
Tingting Jing, Northwestern Polytechnical University, China

IAC-18.C4.9.6
DESIGN AND ANALYSIS OF A FOUR-DUCTS INWARD TURNING INLET FOR XTENDER ENGINE
Chengxiang Zhu, Xiamen University, China

IAC-18.C4.9.7
HEAT TRANSFER ENHANCEMENT OF SUPERCRITICAL HYDROCARBON FUEL IN REGENERATIVE COOLING CHANNELS WITH MICRO-RIBS OF SCRAMJET
Xin Li, Harbin Institute of Technology, China

IAC-18.C4.9.9
NUMERICAL SIMULATION STUDY ON THE SCALAR MIXING CHARACTERISTICS IN SUPERSONIC MIXING LAYERS
Shen Chibing, National University of Defense Technology, China

IAC-18.C4.9.10
RESEARCH ON DYNAMIC CHARACTERISTICS AND CONTROL SCHEME OF KEROSENE-BASED SCRAMJET SYSTEM
Xuan Jin, National University of Defense Technology, China

IAC-18.C4.9.11
THE RESOLUTION ANALYSIS OF TUNABLE DIODE LASER ABSORPTION SPECTROSCOPY SYSTEM FOR VELOCITY MEASUREMENT OF THE SCRAMJET COMBUSTION FLOW
Wei Rao, Academy of Eqiupment, China

IAC-18.C4.9.12
NUMERICAL INVESTIGATIONS ON THE IMPROVEMENT OF BURNING CONDITIONS IN THE SCRAMJET
Sterian Danaila, University POLITEHNICA of Bucharest - Research Center for Aeronautics and Space, Romania

IAC-18.C4.9.13
LATTICE BOLTZMANN SIMULATION OF A KEROSENE DROPLET IMPACT ON WALL OF COMBUSTION CHAMBER IN RBCC
Yan Ba, Northwestern Polytechnical University, China

IAC-18.C4.9.14
NUMERICAL INVESTIGATION ON THE MIXING CHARACTERISTICS OF SHEAR LAYERS IN SUPERSONIC-SUBSONIC FLOW
Kai Ma, Northwestern Polytechnical University, China

IAC-18.C4.9.15 (non-confirmed)
SIMULATION OF SUPERSONIC COMBUSTION BASED ON VERY-LARGE EDDY SIMULATION METHOD
Xingsi Han, Nanjing University of Aeronautics and Astronautics, China

C4.10. Propulsion Technology (3)

October 5 2018, 13:30 — Bremen 3

Co-Chair(s): *Norbert Puettmann , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Riheng Zheng , China Aerospace Science & Industry Corporation (CASIC), China;*
Rapporteur(s): *Angelo Cervone , Delft University of Technology (TU Delft), The Netherlands; Martin Velander , GKN Aerospace Engine Systems, Sweden;*

IAC-18.C4.10.1
KEYNOTE: GREEN SOLUTIONS FOR SPACE PROPULSION
Ulrich Gotzig, Airbus Safran Launchers, Germany

IAC-18.C4.10.2
COMBUSTION CHARACTERSTICS OF LOX-METHANE IN SWIRL COAXIAL INJECTOR HYDROGEN PROPULSION SYSTEM
Abhishek Sharma, Indian Space Research Organization (ISRO), India

IAC-18.C4.10.3
RESEARCH ON THE KEY TECHNOLOGY OF THE 'SWING BEHIND PUMP' THRUST VECTOR REGULATION ARCHITECTURE USED IN LARGE THRUST LOX/KEROSENE ENGINE
Jian ZHAO, Xi'an Aerospace Propulsion Institute, China

IAC-18.C4.10.4
MAXIMIZING SIDE FORCE GENERATION IN AEROSPIKE NOZZLES FOR ATTITUDE AND TRAJECTORY CONTROL
Martin Propst, TU Dresden, Germany

IAC-18.C4.10.5
CRYO-LABORATORY FOR THE INVESTIGATION OF PROPELLANT BEHAVIOUR AND DEVELOPMENT OF PROPELLANT MANAGEMENT TECHNOLOGIES
Jens Gerstmann, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Institute of Space Systems, Germany

IAC-18.C4.10.6
NUMERICAL INVESTIGATION ON PERFORMANCE OF FUEL BOOSTER TURBOPUMP FOR STAGED COMBUSTION CYCLE BASED ROCKET ENGINE.
KHALID RASHID, Indian Space Research Organization (ISRO), India

IAC-18.C4.10.8
FLPP3: TEST RESULTS OF FULL ELECTRICALLY ACTUATED ENGINE VALVES
Felipe Juan Dengra Moya, ArianeGroup, Germany

IAC-18.C4.10.9
SLOSHING AND PRESSURIZATION TESTS FOR MEMBRANE TANK: TESTS, VALIDATION AND MODELS
Jörg Klatte, ArianeGroup, Germany

IAC-18.C4.10.10
TEST OF A HIGHLY REUSABLE LOX/METHANE GAS GENERATOR DEMONSTRATOR IN A FLIGHT-LIKE CONFIGURATION
Yoan Boué, ArianeGroup SAS, France

IAC-18.C4.10.11
IDENTIFICATION AND MATURATION OF TECHNOLOGIES FOR FUTURE LIQUID PROPELLANT ENGINES
Sebastian Soller, ArianeGroup, Germany

IAC-18.C4.10.12
CFD SIMULATION OF REACTIVE FLOW IN CRYOGENIC ROCKET NOZZLE AND PERFORMANCE PREDICTION OF LVM III CE20 NOZZLE
Ajith M, Vikram Sarabhai Space Centre, ISRO, Thiruvananthapuram, India

IAC-18.C4.10.13
THE PYRONUMERIC, A NEW TECHNOLOGY TO ANSWER TO THE FUTURE LAUNCHERS CHALLENGES
Nathalie CESCO, Centre National d'Etudes Spatiales (CNES), France

D1. IAF SPACE SYSTEMS SYMPOSIUM

Coordinator(s): *Jill Prince , National Aeronautics and Space Administration (NASA), United States; Reinhold Bertrand , European Space Agency (ESA), Germany;*

D1.1. Innovative and Visionary Space Systems

October 1 2018, 15:00 — CCB London

Co-Chair(s): *Peter Dieleman , National Aerospace Laboratory (NLR), The Netherlands; Tibor Balint , Art Center College of Design, United States;*
Rapporteur(s): *Camillo Richiello , CIRA Italian Aerospace Research Centre, Italy;*

IAC-18.D1.1.1
MASSIVELY EXTENDED MODULAR MONITORING AND A SECOND LIFE FOR UPPER STAGES
Jan-Gerd Meß, Deutsches Zentrum für Luft- und Raumfahrt, Germany

IAC-18.D1.1.2
EVOLVING ASTEROID STARSHIPS: A BIO-INSPIRED APPROACH FOR INTERSTELLAR SPACE SYSTEMS
Angelo Vermeulen, Delft University of Technology (TU Delft), The Netherlands

IAC-18.D1.1.3
DESIGN AND TESTING OF SELF-DEPLOYABLE STRUCTURES FOR ADVANCED SPACE APPLICATIONS
Antonio Accettura, OHB System AG - Munich, Germany

IAC-18.D1.1.4
A CONCEPT STUDY OF UNIDAD REEMPLAZABLE EN ÓRBITA FOR COMMUNICATIONS SATELLITES IN GEOSTATIONARY ORBIT
Kentaro Nishi, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.D1.1.5
SCENARIOS FOR AFFORDING AND ACHIEVING HUMAN MARS EXPLORATION: SCENARIOS FROM THE FIFTH COMMUNITY WORKSHOP
John Connolly, , United States

IAC-18.D1.1.6
ASTROPLASTIC: FROM COLON TO COLONY
Preetha Gopalakrishnan, University of Calgary, Canada

IAC-18.D1.1.7
THE NEW PARADIGM OF CHINA COMMERCIAL SPACE SYSTEM AND INVESTMENT IN THE FUTURE
Jingnan Zhang, China Academy of Aerospace Systems Science and Engineering, China

IAC-18.D1.1.8
SPACE SERVICING: STRATEGY AND LOGISTICS
Vsevolod Koryanov, Bauman Moscow State Technical University, Russian Federation

IAC-18.D1.1.9
SPACE FACTORY 4.0 - NEW PROCESSES FOR THE ROBOTIC ASSEMBLY OF MODULAR SATELLITES ON AN IN-ORBIT PLATFORM BASED ON „INDUSTRIE 4.0" APPROACH
Thiago Weber Martins, TU Darmstadt, Germany

D1.2. Space Systems Architectures

October 2 2018, 09:45 — CCB London

Co-Chair(s): *Franck Durand-Carrier , Centre National d'Etudes Spatiales (CNES), France; Peter Dieleman , National Aerospace Laboratory (NLR), The Netherlands;*
Rapporteur(s): *Jill Prince , National Aeronautics and Space Administration (NASA), United States;*

IAC-18.D1.2.1
PROBA-3 MISSION: CREATING AN ARTIFICIAL SOLAR ECLIPSE EVERYDAY BY SPACECRAFT FLYING IN FORMATION
Luis F. Peñin, SENER Ingeniería y Sistemas, S.A., Spain

IAC-18.D1.2.2
THE EUCLID SPACECRAFT
Ezio Ciancetta, Thales Alenia Space, Italy

IAC-18.D1.2.3
FROM GRACE TO AVANTI: 15 YEARS OF FORMATION-FLYING EXPERIENCE AT DLR
Jean-Sébastien Ardaens, German Aerospace Center (DLR), Germany

IAC-18.D1.2.4
TRANSFORMABLE SPACECRAFT: A SYSTEM WITH VARIABLE-SHAPE STRUCTURE APPLICABLE TO NONHOLONOMIC ATTITUDE CONTROL
Toshihiro Chujo, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.D1.2.6
OPTIMAL ARCHITECTURES FOR A MARS HELICOPTER DRONE: EXPLORING THE DESIGN SPACE WITH GEEGLEE
Léon Phan, System Value, France

IAC-18.D1.2.7
INFUSE DATA FUSION METHODOLOGY FOR SPACE ROBOTICS, AWARENESS AND MACHINE LEARNING
Mark Post, University of Strathclyde, United Kingdom

IAC-18.D1.2.8
MODES OF OPERATION FOR A 3U CUBESAT WITH HYPERSPECTRAL IMAGING PAYLOAD
Rutwik Jain, Birla Institute of Technology and Science(BITS), India

IAC-18.D1.2.9
SA-4S: CONCEPT AND DEVELOPMENT PLAN OF THE SAB AEROSPACE SEPARATION SYSTEM FOR SMALL SATELLITES.
Manuele Scipioni, SAB AEROSPACE SRL, Italy

IAC-18.D1.2.10
"SYSTEM ENGINEERING CHALLENGES IN ISRO'S MODULAR I-3K SPACECRAFT BUS DESIGN"
SOHIT SAINI, ISRO Satellite Centre (ISAC),ISRO, India

IAC-18.D1.2.11
TECHNOLOGY DEVELOPMENT TARGETS FOR COMMERCIAL IN-SPACE MANUFACTURING
Matthew Moraguez, Massachusetts Institute of Technology (MIT), United States

IAC-18.D1.2.12
DESIGN AND QUALIFICATION OF A MULTIFUNCTIONAL INTERFACE FOR MODULAR SATELLITE SYSTEMS
Martin Kortmann, RWTH Aachen University, Germany

D1.3. Technologies to Enable Space Systems

October 2 2018, 14:45 — CCB London

Co-Chair(s): *Steven Arnold , The Johns Hopkins University Applied Physics Laboratory, United States; Xavier Roser , Thales Alenia Space France, France;*
Rapporteur(s): *Eiichi Tomita , Japan Aerospace Exploration Agency (JAXA), Japan;*

IAC-18.D1.3.1
ADVANCED GNC FOR IN-ORBIT AUTONOMOUS ASSEMBLY OF FLEXIBLE VEHICLES – IOA-GNC
Pablo Colmenarejo, GMV Innovating Solutions, Spain

IAC-18.D1.3.2
GROUND TESTING OF VISION-BASED GNC SYSTEMS BY MEANS OF A NEW EXPERIMENTAL FACILITY
Paolo Lunghi, Politecnico di Milano, Italy

IAC-18.D1.3.3
A HIGHLY INTEGRATED NAVIGATION UNIT FOR ON-ORBIT SERVICING MISSIONS
Vincenzo Capuano, Techno System Developments S.R.L., Italy

IAC-18.D1.3.4
TESTING VISION-BASED GUIDANCE AND NAVIGATION SYSTEMS FOR ENTRY DESCENT AND LANDING OPERATIONS
Steve Parkes, University of Dundee, United Kingdom

IAC-18.D1.3.5
ROVER ORIENTATION ESTIMATION USING SUN SENSORS FOR LUNAR AND PLANETARY EXPLORATION
Takuto Oikawa, Tohoku University, Japan

IAC-18.D1.3.6
A NEW COMPLEMENTARY MULTI-CORE DATA PROCESSOR FOR SPACE APPLICATIONS
Daniele Luchena, ARCA Dynamics, Italy

IAC-18.D1.3.7
PROBLEMS, CHALLENGES AND EXPERIENCES FROM SEVERAL PRACTICAL SOC CHIPS FOR SPACEBORNE ELECTRONICS
Hui Cao, Xi'an Microelectronics Technology Institute, China Academy of Space Electronics Technology (CASET), China Aerospace Science and Technology Corporation (CASC), China

IAC-18.D1.3.8
APPLICATION OF GPU ON-ORBIT AND SELF-ADAPTIVE SCHEDULING BY ITS INTERNAL THERMAL SENSOR
Nan Li, University of Chinese Academy of Sciences; Technology and Engineering Center for Space Utilization, Chinese Academy of Sciences, China

IAC-18.D1.3.9
BEYOND FUNCTIONAL CORRECTNESS - GETTING FLIGHT SOFTWARE TIMING RIGHT
Andreas Wortmann, OHB System AG, Germany

IAC-18.D1.3.10
THE RESEARCH CENTER FOR SPACE COLONY AT THE TOKYO UNIVERSITY OF SCIENCE DUAL SPACE-EARTH DEVELOPMENT OF FUTURE LIVING TECHNOLOGIES
Shinichi Kimura, Tokyo University of Science, Japan

IAC-18.D1.3.11
THERMOELECTRIC SYSTEM OF THERMOSTATING FOR SPACE STATIONS, MOON AND MARTIAN BASES
Oleksandr Loza, Yuzhnoye State Design Office, Ukraine

IAC-18.D1.3.12
FAULT ESTIMATION AND FAULT-TOLERANT CONTROL FOR CONTROL MOMENT GYRO ACTUATED HIGH AGILITY SPACECRAFT
Chengfei Yue, National University of Singapore, Singapore, Republic of

IAC-18.D1.3.13
APPLICATION OF A SCINTILLATOR DETECTOR AS A FAULT TOLERANCE SYSTEM FOR FPGA
Juan Salvador Tafoya Vargas, Universidad Nacional Autónoma de México (UNAM), Mexico

D1.4A. Space Systems Engineering - Methods, Processes and Tools (1)

October 4 2018, 09:45 — CCB London

Co-Chair(s): *Dapeng Wang , China HEAD Aerospace Technology Co., China; Dmitry Payson , ROSCOSMOS, Russian Federation;*
Rapporteur(s): *Franck Durand-Carrier , Centre National d'Etudes Spatiales (CNES), France; Geilson Loureiro , Instituto Nacional de Pesquisas Espaciais (INPE), Brazil;*

IAC-18.D1.4A.1
MODELING SYSTEMS ENGINEERING - APPLYING THE LIFECYCLE MODELING LANGUAGE IN FORM AND CONCEPT
Jerry Sellers, Teaching Science and Technology, Inc., United States

IAC-18.D1.4A.2
TOOL FOR EVALUATION OF FUTURE EO SPACE SYSTEMS DURING PHASE 0/A
Simon Rommelaere, ESA - European Space Agency, The Netherlands

IAC-18.D1.4A.3
CONCURRENT ENGINEERING IN LATER PROJECT PHASES: CURRENT METHODS AND FUTURE DEMANDS
Stephan Siegfried Jahnke, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.D1.4A.4
THE RELATIONSHIP BETWEEN THE MODEL BASED SYSTEM ENGINEERING MODELS AND INFORMATION SYSTEMS TO SUPPORT SPACE PRODUCTS LIFECYCLE PROCESSES
Ana Claudia Silva, Instituto Nacional de Pesquisas Espaciais (INPE), Brazil

IAC-18.D1.4A.5
TARGETS SELECTION METHOD FOR MULTI-OBJECTIVE ASTEROIDS EXPLORATION MISSION
Xiaohui Wang, Beihang University, China

IAC-18.D1.4A.6
SYSTEM-OF-SYSTEMS TOOLS FOR THE ANALYSIS OF TECHNOLOGICAL CHOICES IN SPACE PROPULSION
Cesare Guariniello, Purdue University, United States

IAC-18.D1.4A.7
SPACE SYSTEMS ENGINEERING TOOLS FOR TECHNOLOGY ROADMAPPING ACTIVITIES: TRIS, TECHNOLOGY ROADMAPPING STRATEGY, AND HYDAT, DATABASE ON HYPERSONIC TRANSPORTATION SYSTEMS
Nicole Viola, Politecnico di Torino, Italy

IAC-18.D1.4A.8
MODEL-BASED CONCEPT FRAMEWORK FOR SUBORBITAL HUMAN SPACEFLIGHT MISSIONS
Yaroslav Menshenin, Skolkovo Institute of Science and Technology, Russian Federation

IAC-18.D1.4A.9
AN AUTOMATED STATISTICAL DESIGN TOOL FOR LEO COMMUNICATION SATELLITE CONCEPTUAL DESIGN
Ehsan Zabihian, Satellite Research Institute, Iranian Space Research Center, Iran

IAC-18.D1.4A.10
SYSTEM LEVEL FAULT VERIFICATION OF HIGH-LEVEL AUTONOMIC DEEP SPACE EXPLORATION PROBES
Xiaowei Fu, China Academy of Space Technology (CAST), China

IAC-18.D1.4A.11
ECSS REQUIREMENTS MANAGEMENT: FROM DOORS TO THE FUTURE MASTER DATABASE
Wolfram Knorr, Airbus Defence and Space, Germany

IAC-18.D1.4A.12
GUIDELINES TO DESIGN MULTI-ROLE SUBORBITAL FLIGHT SYSTEMS.
Roberta Fusaro, Politecnico di Torino, Italy

D1.4B. Space Systems Engineering - Methods, Processes and Tools (2)

October 4 2018, 14:45 — CCB London

Co-Chair(s): *Geilson Loureiro , Instituto Nacional de Pesquisas Espaciais (INPE), Brazil; Norbert Frischauf , , Austria;*
Rapporteur(s): *Otfrid Liepack , National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States;*

IAC-18.D1.4B.1
JOINT EFFORT OF DLR AND JPL TOWARDS MODEL-BASED PREDICTION OF ROVER LOCOMOTION PERFORMANCE FOR OPERATION PURPOSES
Fabian Buse, German Aerospace Center (DLR), Germany

IAC-18.D1.4B.2
SYSTEMPADS: A UNIQUE APPROACH TO IMPLEMENTING SYSTEMS ENGINEERING TASKS
Guillermo Jimenez, , United States

IAC-18.D1.4B.3
MODEL BASED REQUIREMENTS VERIFICATION LIFECYCLE
Sam Gerené, Rhea Group, Belgium

IAC-18.D1.4B.4
ORGANIZATIONALLY DISTRIBUTED REQUIREMENTS MANAGEMENT ON THE NASA EUROPA CLIPPER MISSION
Maxwell Wieder, The Johns Hopkins University Applied Physics Laboratory, United States

IAC-18.D1.4B.7
THE EU:CROPIS ASSEMBLY, INTEGRATION AND VERIFICATION CAMPAIGNS: BUILDING THE FIRST DLR COMPACT SATELLITE
Sebastian Kottmeier, German Aerospace Center (DLR), Germany

IAC-18.D1.4B.8
ENABLING A CONCEPTUAL DATA MODEL AND WORKFLOW INTEGRATION ENVIRONMENT FOR CONCURRENT LAUNCH VEHICLE ANALYSIS
Philipp M. Fischer, DLR (German Aerospace Center), Germany

IAC-18.D1.4B.10
ENHANCED ROBUST PORTFOLIO OPTIMIZATION FOR COST, PERFORMANCE RISK AND SCHEDULE ANALYSIS OF A LUNAR MISSION.
William O'Neill, Purdue University, United States

IAC-18.D1.4B.11
SPACE SYSTEMS RESILIENCE ENGINEERING AND GLOBAL SYSTEM RELIABILITY OPTIMISATION UNDER IMPRECISION AND EPISTEMIC UNCERTAINTY
Gianluca Filippi, University of Strathclyde, United Kingdom

IAC-18.D1.4B.12
INNOVATIVE MDO METHODOLOGY TO DESIGN SPACE LAUNCH SYSTEM - APPLICATION TO ALTAIR AIR-LAUNCH SYSTEM
Cedric Dupont, BERTIN Technologies, France

D1.5. Lessons Learned in Space Systems: Achievements, Challenges, Best Practices, Standards.

October 5 2018, 09:45 — CCB London

Co-Chair(s): *Eiichi Tomita , Japan Aerospace Exploration Agency (JAXA), Japan; Klaus Schilling , University Wuerzburg, Germany;*
Rapporteur(s): *Otfrid Liepack , National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States;*

IAC-18.D1.5.1
THE EVOLUTION OF SATELLITE OPERATIONS: FROM 5 TO 100'S OF SATELLITES
Thomas Haylock, Planet, Germany

IAC-18.D1.5.2
A NEW APPROACH TO MISSION CLASSIFICATION AND RISK MANAGEMENT FOR NASA SPACE FLIGHT MISSIONS
Francesco Bordi, The Aerospace Corporation, United States

IAC-18.D1.5.3
ECSS EVOLUTION - PROJECT PHASING AND REVIEWS IN FUTURE SPACE PROJECTS
Daniel Schiller, DLR (German Aerospace Center), Germany

IAC-18.D1.5.4
E-GLOSSARY CAPABILITIES AND POTENTIAL BENEFICIARIES – AS APPLICATION OF BEST PRACTICE
Andrew Herd, ESA - European Space Agency, The Netherlands

IAC-18.D1.5.5
AGILE CHANGE OF PRODUCT DEVELOPMENT METHODS IN A MICROSATELLITE COMPANY
Hubert Anton Moser, LuxSpace Sarl, Luxemburg

IAC-18.D1.5.6
UNAWARENESS OF THE SYSTEM LEVEL VIEW IN THE MAGNETIC DESIGN
Kazuyuki Okada, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.D1.5.7
RESEARCH AND DEVELOPMENT OF INTEGRATED MODULAR AVIONICS FOR THE LOW-COST MICRO-SATELLITES
Lianxiang Jiang, China Academy of Space Technology (CAST), China

IAC-18.D1.5.8
USING HISTORICAL PRACTICES TO DEVELOP SAFETY STANDARDS FOR COOPERATIVE ON-ORBIT RENDEZVOUS AND PROXIMITY OPERATIONS
David Barnhart, University of Southern California, United States

D1.6. Cooperative and Robotic Space Systems

October 5 2018, 13:30 — CCB London

Co-Chair(s): *Dapeng Wang , China HEAD Aerospace Technology Co., China; Igor V. Belokonov , Samara State Aerospace University, Russian Federation;*
Rapporteur(s): *Steven Arnold , The Johns Hopkins University Applied Physics Laboratory, United States;*

IAC-18.D1.6.1
TIM: A FORMATION OF SMALL SATELLITES FOR PHOTOGRAMMETRIC EARTH OBSERVATION
Klaus Schilling, University Wuerzburg, Germany

IAC-18.D1.6.2
ARM/CMG COOPERATIVE CONTROL OF SPACE ROBOT SATELLITE
Chise Taniguchi, Tokyo Metropolitan University, Japan

IAC-18.D1.6.3
CAESAR: SPACE ROBOTICS TECHNOLOGY FOR ASSEMBLY, MAINTENANCE, AND REPAIR
Gerhard Grunwald, DLR (German Aerospace Center), Germany

IAC-18.D1.6.4
THE OHB ROADMAP FOR AUTOMATION AND ROBOTICS IN SPACE – KEY TECHNOLOGIES FOR FUTURE EXPLORATION AND ORBITAL SYSTEMS
Markus Thiel, OHB System AG - Oberpfaffenhofen, Germany

IAC-18.D1.6.5
MODULAR ACTIVE PAYLOAD MODULES FOR ROBOTIC HANDLINGS IN FUTURE ORBITAL MISSIONS
Wiebke Brinkmann, DFKI Robotics Innovation Center Bremen, Germany

IAC-18.D1.6.7
TOWARDS AN AUTONOMOUS FREE-FLYING ROBOT FLEET FOR INTRA-VEHICULAR TRANSPORTATION OF LOADS IN UNMANNED SPACE STATIONS
Rodrigo Ventura, Institute for Systems and Robotics, Portugal

IAC-18.D1.6.8
COLLISION DETECTION AND ISOLATION FOR FREE-FOATING SPACE ROBOTS
Francesco Cavenago, Politecnico di Milano, Italy

IAC-18.D1.6.9
REAL-TIME AUTONOMOUS VISION-BASED UNCOOPERATIVE POSE DETERMINATION OF KNOWN AND UNKNOWN SPACE OBJECTS
Vincenzo Capuano, California Institute of Technology, United States

IAC-18.D1.6.10
METHODS AND OUTCOMES OF THE COMRADE PROJECT - DESIGN OF ROBUST COMBINED CONTROL FOR ROBOTIC SPACECRAFT AND MANIPULATOR IN SERVICING MISSIONS: COMPARISON BETWEEN HINF AND NONLINEAR LYAPUNOV-BASED APPROACHES
Pablo Colmenarejo, GMV Innovating Solutions, Spain

IAC-18.D1.6.11
ON-LINE CENTER OF MASS AND INERTIA DETERMINATION OF A SPACE DEBRIS DURING A DEORBITING MISSION
Marco Sabatini, Sapienza University of Rome, Italy

IAC-18.D1.6.12
THE ERGO FRAMEWORK AND ITS USE IN PLANETARY/ORBITAL SCENARIOS
Jorge Ocón, GMV Aerospace & Defence SAU, Spain

D2. IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM

Coordinator(s): *Markus Jäger , Airbus Defence & Space, Space Systems, Germany; Steve Creech , National Aeronautics and Space Administration (NASA), United States;*

Secretary(s): *Yuguang Yang , China Aerospace Science & Industry Corporation (CASIC), China;*

D2.1. Launch Vehicles in Service or in Development

October 1 2018, 15:00 — CCB Lloydsaal

Co-Chair(s): *Iwao Igarashi , Mitsubishi Heavy Industries Ltd. - Nagoya Aerospace Systems, Japan; Randolph Kendall , The Aerospace Corporation, United States;*
Rapporteur(s): *Igor V. Belokonov , Samara State Aerospace University, Russian Federation;*

IAC-18.D2.1.1
THE ARIANE 6 LAUNCH SYSTEM DEVELOPMENT, STATUS AND PERSPECTIVES
Julio Aprea, European Space Agency (ESA), France

IAC-18.D2.1.2
ARIANE 6 LAUNCHER SYSTEM DEVELOPMENT STATUS
Mathieu CHAIZE, Airbus Safran Launchers, France

IAC-18.D2.1.3
THE VEGA SPACE TRANSPORTATION SYSTEM DEVELOPMENT: STATUS AND PERSPECTIVES
Giorgio Tumino, European Space Agency (ESA), France

IAC-18.D2.1.4
NASA'S SPACE LAUNCH SYSTEM MOVES INTO TESTING AND INTEGRATION
Garry Lyles, NASA Marshall Space Flight Center, United States

IAC-18.D2.1.5
INNOVATION & LAUNCH SERVICES FOR THE NEXT DECADE
Bernard Kutter, United Launch Alliance, United States

IAC-18.D2.1.6
LAUNCH SYSTEM REUSE
Akhil Gujral, The Aerospace Corporation, United States

IAC-18.D2.1.7
THE LATEST DEVELOPMENT STATUS OF H3
Akihiro Sato, Mitsubishi Heavy Industries, Ltd., Japan

IAC-18.D2.1.8
THE RESULT OF EPSILON LAUNCH VEHICLE THIRD FLIGHT AND PLAN FOR MULTI LAUNCHES
Kyoko Oribe, IHI Aerospace Co, Ltd., Japan

IAC-18.D2.1.9
SOYUZ-2: NEW SOLUTIONS FOR DEDICATED LAUNCHES
Mila Savelyeva, JSC Glavcosmos, Russian Federation

IAC-18.D2.1.10 (non-confirmed)
CURRENT DEVELOPMENTS AND TECHNICAL CHALLENGES OF LOW-COST SPACE TRANSPORTATION SYSTEM
Shengbao Wu, , China

D2.2. Launch Services, Missions, Operations and Facilities

October 2 2018, 09:45 — CCB Lloydsaal
Co-Chair(s): Francesco Santoro , Altec S.p.A., Italy; Jerry Cook , National Aeronautics and Space Administration (NASA), Marshall Space Flight Center, United States;
Rapporteur(s): Yves Gerard , Airbus Defence & Space, France;

IAC-18.D2.2.1
DEVELOPMENT OF MODERN MISSION ANALYSIS SYSTEM AND MISSION PLANNING IMPROVEMENT IN H3 LAUNCH SYSTEM PROGRAM
Yoshichika Tanabe, Mitsubishi Heavy Industries, Ltd., Japan

IAC-18.D2.2.2
DEVELOPMENT AND PROCESS OPTIMIZATION OF LM-3A SERIES LAUNCH VEHICLES CONTROL SYSTEM IN CONTINUAL LAUNCH MISSIONS
Xiaopeng Shang, Beijing Aerospace Automatic Control Institute, China

IAC-18.D2.2.3
COMPATIBLE AND RECONFIGURABLE TEST LAUNCH CONTROL SYSTEM OF THE EXPEDITION SERIES UPPER STAGE
Meng Lian, Beijing Aerospace Automatic Control Institute, China

IAC-18.D2.2.4
STUDY ON THE EXPERIMENT OF PROPELLANT REFUELING BASED ON SATELLITE PROPULSION SYSTEM.
Yuanding Wang, Shanghai Institute of Space Propulsion, China

IAC-18.D2.2.5
INCREASED CAPABILITIES AT ESRANGE –SMALL SATELLITE LAUNCHES AND TESTS OF REUSABLE MOTORS AND STAGES
Anne Ytterskog, SSC, Sweden

IAC-18.D2.2.6
ANDØYA SPACE PORT – THE NORWEGIAN LAUNCH FACILITY FOR SMALL SATELLITES
Sandra Blindheim, Andøya Space Center, Norway

IAC-18.D2.2.7
INFRASTRUCTURE AND FACILITIES OF THE NEW RUSSIAN VOSTOCHNY COSMODROME
Mila Savelyeva, JSC Glavcosmos, Russian Federation

IAC-18.D2.2.8
THE CASE FOR AN INDIGENOUS AUSTRALIAN SPACEPORT
Jack Hooper, University of Adelaide, Australia

IAC-18.D2.2.10
BLOCKCHAIN FOR ON-DEMAND SMALL LAUNCH VEHICLE SUPPLY CHAIN
Raju K, AgniKul Cosmos, India

IAC-18.D2.2.12
INVESTIGATION OF FEASIBLE OPTIONS FOR DEVELOPING A MICRO-LAUNCHER INDUSTRY IN SOUTH AFRICA
Tori Campbell, University of Cape Town, South Africa

IAC-18.D2.2.13
SPACEPORTS: GATEWAYS TO SPACEFLIGHTS OF THE FUTURE AND CASE STUDY OF PRIVATE SPACEPORT FEASIBILITY
Ugur Guven, UN CSSTEAP, United States

D2.3. Upper Stages, Space Transfer, Entry and Landing Systems

October 3 2018, 09:45 — CCB Lloydsaal

Co-Chair(s): *Brian Smith , Raytheon Canada Limited, Canada; Oliver Kunz , RUAG Space, Switzerland;*
Rapporteur(s): *Oleg Ventskovskiy , , Ukraine;*

IAC-18.D2.3.1
THE ORION-ESM PROPULSION SYSTEM: STATUS AND OUTLOOK
Markus Jäger, Airbus Defence & Space, Space Systems, Germany

IAC-18.D2.3.2
FLPP NEO MUSE - MULTIFUNCTIONAL UPPER STAGE EXPRESS
Menko Wisse, ArianeGroup, Germany

IAC-18.D2.3.3
FREGAT UPPER STAGE CAPABILITIES FOR LAUNCHING DEDICATED AND/OR MILTIPLE PAYLOADS INTO A WIDE RANGE OF ORBITS
Mila Savelyeva, JSC Glavcosmos, Russian Federation

IAC-18.D2.3.4
DEMISE OBSERVATION CAPSULE: PROGRESS UPDATE 2018
Stefan van der Linden, S[&]T, The Netherlands

IAC-18.D2.3.5
AUTONOMOUS OPERATION TECHNIQUE OF UPPER STAGE FOR MULTI-SATELLITE DEPLOYMENT
Rui Xu, Beijing Institute of Technology, China

IAC-18.D2.3.8
INTERPLANETARY SUPPLY CHAIN NETWORK FOR SPACE EXPLORATION: STUDY OF A MODELING FRAMEWORK
Giovanni Giardina, Associazione Italiana di Aeronautica e Astronautica (AIDAA), Spain

IAC-18.D2.3.9
ORBIT INCLINATION CHANGE OF LUNAR PROBES UTILIZING EARTH'S GRAVITY
Hou Xiyun, Nanjing University, China

IAC-18.D2.3.10
DEVELOPMENT OF A COMPUTATIONAL LIFTING BODY GLIDER MODEL FOR FLIGHT SIMULATION STUDIES
Nanette Valentour, University of North Dakota, United States

IAC-18.D2.3.11
SPACE RIDER: THE REUSABLE EUROPEAN PLATFORM FOR IN-ORBIT EXPERIMENTATION
ANGELO DENARO, Thales Alenia Space Italia, Italy

IAC-18.D2.3.12
REUSABLE CRUISE ROCKET FOR URGENT CARGO DELIVERY IN CASE OF DISASTER
Roman Mykhalchyshyn, Yuzhnoye State Design Office, Ukraine

IAC-18.D2.3.13
CONCEPT FOR ATMOSPHERIC FLIGHT AT SUPER-ORBITAL-SPEED USING DOWNWARD LIFT
Jisong Zhao, Nanjing University of Aeronautics and Astronautics, China

D2.4. Future Space Transportation Systems

October 3 2018, 14:45 — CCB Lloydsaal

Co-Chair(s): *Carina Dorbath , MT Aerospace AG, Germany; José Gavira Izquierdo , European Space Agency (ESA), The Netherlands;*
Rapporteur(s): *Nicolas Bérend , ONERA - The French Aerospace Lab, France;*

IAC-18.D2.4.1
FUTURE EUROPEAN REUSABLE BOOSTER STAGES: EVALUATION OF VTHL AND VTVL RETURN METHODS
Jascha Wilken, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Institute of Space Systems, Germany

IAC-18.D2.4.2
THE CONCEPT OF THE DEVELOPMENT OF THE REUSABLE INTERORBITAL SPACE TRANSPORTATION SYSTEM FOR PROVIDING LUNAR AND INTERPLANETARY MISSIONS
Sergii Moskalov, Yuzhnoye State Design Office, Ukraine

IAC-18.D2.4.3
STRATEGIES FOR RE-USE OF LAUNCH VEHICLE FIRST STAGES
Matthew Vernacchia, Massachusetts Institute of Technology (MIT), United States

IAC-18.D2.4.4
ASSESSMENT OF MULTIPLE MISSION REUSABLE LAUNCH VEHICLES
Martin Sippel, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.D2.4.5
PREPARING THE FUTURE OF EUROPEAN SPACE TRANSPORTATION
Kate Underhill, European Space Agency (ESA), France

IAC-18.D2.4.6
POSSIBLE AREAS OF RUSSIAN-EUROPEAN COOPERATION ON THE MARKET OF LIGHT LV LAUNCH SERVICES
Aleksandr Medvedev, Central Research Institute for Machine Building (FGUP TSNIIMASH), Russian Federation

IAC-18.D2.4.7
EUROPEAN PLATFORM FOR POST-ISS UTILIZATION WITH THE DREAM CHASER® SPACECRAFT
Marco Berg, OHB System, Germany

IAC-18.D2.4.8
SPACESTART, THE SOLUTION FOR SPACECRAFT SERVICES AND TRANSPORTATION IN SPACE.
Carlo Cassi, Thales Alenia Space Italia, Italy

IAC-18.D2.4.9
A COMPREHENSIVE MODELING FRAMEWORK FOR INTEGRATED SPACECRAFT AND TRAJECTORY DESIGN OF AN ELECTRIC SPACE TUG
Martina Mammarella, Politecnico di Torino, Italy

IAC-18.D2.4.10
NAVIGATING OUR CISLUNAR BACKYARD ENABLED BY ACES
Melissa Sampson, Ball Aerospace, United States

D2.5. Technologies for Future Space Transportation Systems

October 4 2018, 09:45 — CCB Lloydsaal

Co-Chair(s): *Giuseppe Rufolo , CIRA Italian Aerospace Research Centre, Italy; Lin Shen , China Academy of Launch Vehicle Technology (CALT), China;*
Rapporteur(s): *Patrick M. McKenzie , RUAG Space, United States;*

IAC-18.D2.5.1
TANKS AND STRUCTURES FOR THE NEW ARIANE 6
Christopher Chaffardon, MT Aerospace AG, Germany

IAC-18.D2.5.2
RE-ENTRY GNC CONCEPT FOR A REUSABLE ORBITAL PLATFORM (SPACE RIDER)
Rodrigo Haya Ramos, SENER Ingenieria y Sistemas, S.A., Spain

IAC-18.D2.5.3
FROG, A ROCKET FOR GNC DEMONSTRATIONS
David Monchaux, Centre National d'Etudes Spatiales (CNES), France

IAC-18.D2.5.4
RUAG'S APPROACH TO REUSABLE PAYLOAD FAIRINGS IN FUTURE LAUNCHERS
Tobias Gerngross, RUAG Space, Switzerland

IAC-18.D2.5.5
AN INNOVATIVE THERMAL PROTECTION SYSTEM WITH OPPOSING JET THROUGH EXTENDED NOZZLE AND FILM COOLING FOR REUSABLE LAUNCH VEHICLES
Shigeru Aso, Kyushu University, Japan

IAC-18.D2.5.6
DEVELOPMENT AND TESTING OF AN AERIAL LIQUID OXYGEN TANKER SUPPORT AIRCRAFT TO ENABLE LOW COST LEO LAUNCH SERVICES
Charles Lauer, Rocketplane Global, Inc., United States

IAC-18.D2.5.7
PRESENT STATUS OF SYSTEM VERIFICATION STUDY BY REUSABLE VEHICLE EXPERIMENT
Satoshi Nonaka, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.D2.5.8
DESIGN OF A CONTINUOUSLY CONTROLLED PRESSURIZATION SYSTEM FOR REUSABLE LAUNCH VEHICLES
Sheng Zhao, China Academy of Launch Vehicle Technology (CALT), China

IAC-18.D2.5.9
PRELIMINARY GUIDANCE AND NAVIGATION DESIGN FOR THE UPCOMING DLR REUSABILITY FLIGHT EXPERIMENT (REFEX)
Marco Sagliano, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.D2.5.10
THE NATIONAL PROCEED PROGRAM - INNOVATIVE LAUNCHER TECHNOLOGIES TO ENHANCE CRYOGENIC UPPER STAGES
Ralf Knoche, ArianeGroup, Germany

IAC-18.D2.5.11
A CONCEPT STUDY OF A LAUNCH VEHICLE PROPELLED BY SOLID-FUEL SCRAMJET
Yi Li, Northwestern Polytechnical University, China

IAC-18.D2.5.12
FLIGHT SIMULATIONS OF THE STRATOS III PARACHUTE RECOVERY SYSTEM
Lars Pepermans, Delft Aerospace Rocket Engineering (DARE), The Netherlands

D2.6. Future Space Transportation Systems Verification and In-Flight Experimentation

October 4 2018, 14:45 — CCB Lloydsaal

Co-Chair(s): *David E. Glass , National Aeronautics and Space Administration (NASA), United States; Sreedhara Panicker Somanath , Indian Space Research Organization (ISRO), India; Rapporteur(s): Tetsuo Hiraiwa , Japan Aerospace Exploration Agency (JAXA), Japan;*

IAC-18.D2.6.1
AN UPDATE OF THE UPCOMING DLR REUSABILITY FLIGHT EXPERIMENT - REFEX
Peter Rickmers, German Aerospace Center (DLR), Bremen, Germany

IAC-18.D2.6.2
RECENT DEVELOPMENT OF FLIGHT DEMONSTRATORS FOR REUSABLE SUBORBITAL TECHNOLOGIES AND IT'S APPLICATION
Guna Surendra Gossamsetti, Kyushu Institute of Technology, Japan

IAC-18.D2.6.3
AERODYNAMIC STUDIES IN PREPARATION FOR CALLISTO - REUSABLE VTOL LAUNCHER FIRST STAGE DEMONSTRATOR
Josef Klevanski, Deutsches Zentrum fuer Luft- und Raumfahrt (DLR), Germany

IAC-18.D2.6.4
CALLISTO PROJECT – MECHANICAL ARCHITECTURE AND STRUCTURAL DESIGN CHALLENGES IN THE FRAME OF A REUSABLE FIRST STAGE DEMONSTRATION VEHICLE
Olga Diaz Lopez, Centre National d'Etudes Spatiales (CNES), France

IAC-18.D2.6.5
EXPERIMENTAL FLIGHT DATA ANALYSIS OF THE STRATOS II+ SOUNDING ROCKET
Felix Lindemann, University of Stuttgart, Germany

IAC-18.D2.6.6
DEVELOPMENT AND FLIGHT TESTING OF A ROCKET POWERED UAV AS PATHFINDER FOR A REUSABLE SOUNDING ROCKET.
Jeroen Wink, Dawn Aerospace, The Netherlands

IAC-18.D2.6.7
SUB-ORBITAL ROCKETS THE FAST AND EASY WAY TO REACH SPACE
Christian Lockowandt, SSC, Sweden

IAC-18.D2.6.8
SOUNDING ROCKETS ARE UNIQUE EXPERIMENTAL PLATFORMS
Rainer Kirchhartz, German Aerospace Center (DLR), Germany

IAC-18.D2.6.9
APPLICATION OF AEROSPIKE TO HYPERSONIC VEHICLE: THE SCIENTIFIC FLIGHT TEST OF CHINA'S FIRST COMMERCIAL ROCKET
Fan Deng, One Space Technology Co., Ltd., China

IAC-18.D2.6.10
BRINGING THE PROPULSION SYSTEM OF THE FIRST ORION-ESM FLIGHT UNIT TO LIFE
Christian Eger, ArianeGroup, Germany

D2.7. Small Launchers: Concepts and Operations (Part I)

October 2 2018, 14:45 — CCB Lloydsaal

Co-Chair(s): *Harry A. Cikanek , National Oceanic and Atmospheric Administration (NOAA), United States; Ulf Palmnäs, SSC, Sweden;*
Rapporteur(s): *Julio Aprea , European Space Agency (ESA), France;*

IAC-18.D2.7.1
THE LIGHT LAUNCHER LANDSCAPE: A COMPILATION AND ASSESSMENT OF PUBLICLY AVAILABLE DATA ON MARKET, COMPETITION AND FINANCING
Holger Burkhardt, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.D2.7.2
SOUNDING ROCKET SS-520: ITS CAPABILITIES AS A CUBESAT LAUNCH VEHICLE
Takahiro Ito, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.D2.7.3
ROCKET LAB: OPENING ACCESS TO LEO FOR THE SMALL SATELLITE MARKET
Morgan Bailey, Rocket Lab, New Zealand

IAC-18.D2.7.4
LAUNCHERONE: RESPONSIVE LAUNCH FOR SMALL SATELLITES
Sirisha Bandla, Virgin Galactic L.L.C, United States

IAC-18.D2.7.5
LOW COST SMALL-SATELLITE ACCESS TO SPACE USING HYBRID ROCKET PROPULSION
Christian Schmierer, German Aerospace Center (DLR), Germany

IAC-18.D2.7.6
SMALL INNOVATIVE LAUNCHER FOR EUROPE: RESULTS OF THE H2020 PROJECT SMILE
Bertil Oving, Netherlands Aerospace Centre (NLR), The Netherlands

IAC-18.D2.7.7 (non-confirmed)
KEYNOTE: EXPERIENCE FROM SUBORBITAL REUSABLE LAUNCHES
Ariane Cornell, Blue Origin LLC, United States

IAC-18.D2.7.8
ALTAIR INNOVATIVE AIR-LAUNCH SYSTEM – CONSOLIDATED DESIGN, LESSONS LEARNED AND PERSPECTIVE
Nicolas Bérend, ONERA - The French Aerospace Lab, France

IAC-18.D2.7.9
DEVELOPMENT AND LAUNCH EXPERIMENTS OF A HYDROCARBON LIQUID PROPELLANT ORBITAL/SUB-ORBITAL LAUNCHER
Ryuichiro KANAI, Interstellar Technologies Inc., Japan

D2.8-A5.4. Space Transportation Solutions for Deep Space Missions

October 5 2018, 09:45 — CCB Lloydsaal

Co-Chair(s): *Andrew Aldrin , Florida Institute of Technology, United States; Ernst Messerschmid , University of Stuttgart, Germany; K. Bruce Morris , RUAG Space, United States;*
Rapporteur(s): *Gerhard Schwehm , European Space Agency (ESA), The Netherlands;*

IAC-18.D2.8-A5.4.1
PAYLOAD UTILIZATION IN NASA'S SPACE LAUNCH SYSTEM
Steve Creech, National Aeronautics and Space Administration (NASA), United States

IAC-18.D2.8-A5.4.3
SPACE TRANSPORTATION VEHICLES FOR CARGO DELIVERY TO THE ORBITS OF SMALL CELESTIAL BODIES
Oleg Sergeevich Grafodatsky, Lavochkin Association, Russian Federation

IAC-18.D2.8-A5.4.4
AN ANALYSIS AND SELECTION OF LAUNCH WINDOWS AND ORBITAL TRAJECTORIES FOR THE JESSE OWENS THERMONUCLEAR PROPULSION INTERPLANETARY SPACEFLIGHT MISSION
Taylor Huneycutt, The Ohio State University College of Engineering, United States

IAC-18.D2.8-A5.4.5
ANALYSIS OF NUCLEAR THERMAL PROPULSION (NTP) ENABLED HELIOPAUSE TRAJECTORIES, USING SOLAR-OBERTH MANEUVERS AND INNER PLANETARY GRAVITY ASSIST
Dennis Scott, The Ohio State University, United States

IAC-18.D2.8-A5.4.6
DESIGN AND OPTIMIZATION OF TRANSFER OF RESOURCES FROM THE LUNAR SURFACE TO LUNAR ORBIT
Giovanni Artuso, Politecnico di Torino, Italy

IAC-18.D2.8-A5.4.7
DEEP SPACE TRANSPORTATION ENHANCED BY 20KW-CLASS HALL EFFECT THRUSTER
Christopher Andrea Paissoni, Politecnico di Torino, Italy

IAC-18.D2.8-A5.4.8
A NOVEL METHOD FOR MANNED ASTEROIDS LANDING MISSION SCALE ANALYSIS BASED ON MISSION ARCHITECTURE MATRIX
Yuxian Yue, Beihang University, China

IAC-18.D2.8-A5.4.10
EXPLOITING A HIGH-POWER ELECTRIC SPACE TUG TO SUPPORT THE DEEP SPACE GATEWAY
Martina Mammarella, Politecnico di Torino, Italy

IAC-18.D2.8-A5.4.11
RESEARCH ON THE PRELIMINARY CONCEPTUAL DESIGN OF ORBIT TRANSFER VEHICLE BASED ON NUCLEAR THERMAL POWER
Dong Zhang, National Key Laboratory of Aerospace Flight Dynamics,Northwestern Polytechnical University,Xi'an,, China

D2.9-D6.2. Safe Transportation Systems for Sustainable Commercial Human Spaceflight / Small Launchers: Concepts and Operations (Part II)

October 5 2018, 13:30 — CCB Lloydsaal

Co-Chair(s): *Aline Decadi , HE Space Operations, France; Martin Sippel , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Charles E. Cockrell Jr. , National Aeronautics and Space Administration (NASA), United States;*

IAC-18.D2.9-D6.2.1
EVOLUTION OF CREW SAFETY CRITERIA FOR FUTURE SPACE TRANSPORTATION SYSTEMS
Aline Decadi, HE Space Operations, France

IAC-18.D2.9-D6.2.2
FROM AVIATION TOURISM TO SUBORBITAL SPACE TOURISM: A STUDY AND DISCUSSION ON TOURIST SCREENING CRITERIA AND BUSINESS OPPORTUNITIES
Eva Yi-Wei Chang, University of Science & Technology, Taiwan, China

IAC-18.D2.9-D6.2.3
RISK MANAGEMENT FOR COMMERCIAL HUMAN SPACEFLIGHT
Andrea Harrington, Air University, United States

IAC-18.D2.9-D6.2.4
A NEW COMMERCIAL SPACEFLIGHT TRAINING PROGRAM FOR SUBORBITAL AND ORBITAL SPACEFLIGHT
Charles Lauer, Blue Abyss, United States

IAC-18.D2.9-D6.2.5
THE ROLE OF PARLIAMENTS IN SPACE AND SECURITY
Angeliki Papadimitriou, European Space Agency (ESA), France

IAC-18.D2.9-D6.2.7
INTERNAL NOISE SOURCE LOCATION OF MANNED SPACECRAFT CAPSULE BASED ON SPHERICAL MICROPHONE ARRAY
Dandan Ding, , China

IAC-18.D2.9-D6.2.8
A CRITICAL ASSESSMENT OF THE SMALL LAUNCH VEHICLE MARKET
Daniel Adams, United Launch Alliance, United States

IAC-18.D2.9-D6.2.9
SMALL LAUNCH VEHICLES - A 2018 STATE OF THE INDUSTRY SURVEY
Carlos Niederstrasser, Northrop Grumman Corporation, United States

IAC-18.D2.9-D6.2.10
INVESTIGATION ON REENTRY AND RECOVERY SCENARIOS OF A SUBORBITAL ROCKET FOR REUSABILITY PURPOSES
Hamed Gamal, SpaceForest Ltd., Poland

IAC-18.D2.9-D6.2.11
ILR-33 „AMBER" ROCKET - A PLATFORM FOR MICROLAUNCHER SYSTEM TECHNOLOGY DEVELOPMENT
Dawid Cieslinski, Institute of Aviation, Poland

IAC-18.D2.9-D6.2.12
OVERVIEW OF THE SABER MISSION AND LAUNCH VEHICLE DESIGN
Jared Fuchs, University of Alabama in Huntsville, United States

D3. 16th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT

Coordinator(s): *Alain Pradier , European Space Agency (ESA), The Netherlands; John C. Mankins , ARTEMIS Innovation Management Solutions, LLC, United States;*

D3.1. Strategies & Architectures as the Framework for Future Building Blocks in Space Exploration and Development

October 1 2018, 15:00 — Bremen 1

Co-Chair(s): *John C. Mankins , ARTEMIS Innovation Management Solutions, LLC, United States; Maria Antonietta Perino , Thales Alenia Space Italia, Italy;*
Rapporteur(s): *Anouck Girard , University of Michigan, United States;*

IAC-18.D3.1.1
ADVANCING THE VISION OF A MOON VILLAGE: RECENT PROGRESS
John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States

IAC-18.D3.1.2
BENEFITS OF A JAPAN-AUSTRALIA ALLIANCE WITHIN A PROPOSED INTERNATIONAL GOVERNANCE STRUCTURE FOR A FUTURE MOON BASE
Danielle DeLatte, University of Tokyo, Japan

IAC-18.D3.1.3
COPUOS SIMULATION WORKSHOP RESULTS FROM THE 2018 ISU SPACE STUDIES PROGRAM
Tuva Atasever, International Space University, France

IAC-18.D3.1.4
INTERFACE STANDARDIZATION FOR THE MOON VILLAGE
Diogo Coutinho, International Space University (ISU), Germany

IAC-18.D3.1.5
THE INTERNATIONAL LUNAR DECADE: FRAMEWORK FOR INTERNATIONAL COOPERATION IN LUNAR DEVELOPMENT
Vidvuds Beldavs, University of Latvia, Latvia

IAC-18.D3.1.6
DESIGN OF A MODULAR MULTIPURPOSE MARS LANDER CONCEPT AS HIGH RELIABILITY DEPLOYMENT ARCHITECTURE FOR A ROBOTIC RECONNAISSANCE UNIT
Juan Carlos Mariscal, Facultad de Ingeniería-UNAM, Mexico

IAC-18.D3.1.7
KEY BUILDING BLOCKS FOR FUTURE SYSTEMS OF SYSTEMS FOR EXPLORATION + MODULAR, SCALABLE AVIONICS
Matthias Maeke-Kail, , Austria

IAC-18.D3.1.8
SPACE READY: THE LAUNCHPAD FOR EMERGING AGENCIES
Ben Adams, International Space University (ISU)/University of South Australia, Australia

IAC-18.D3.1.9
STRATEGIC CONSIDERATIONS FOR RESOURCE UTILISATION IN A FUTURE SPACE-BASED ECONOMY
Manny Shar, Bryce Space and Technology, United Kingdom

IAC-18.D3.1.10
TECHNOLOGY-DRIVEN CHALLENGES IN THE GOVERNANCE OF FUTURE SPACE COLONIES
Nikola Schmidt, Charles University, Czech Republic

IAC-18.D3.1.11
Y-ISEF: A NEW BUILDING BLOCK FOR ENABLING THE FUTURE OF SPACE EXPLORATION
Mika Ochiai, Japan Aerospace Exploration Agency (JAXA), Japan

D3.2. Systems and Infrastructures to Implement Future Building Blocks in Space Exploration and Development

October 2 2018, 14:45 — Bremen 1

Co-Chair(s): *Paivi Jukola , Aalto University, Finland; Scott Hovland , European Space Agency (ESA), The Netherlands;*
Rapporteur(s): *William H. Siegfried , The Boeing Company, United States;*

IAC-18.D3.2.1
CO2 HYDROGENATION AND WATER ELECTROLYZER TANDEM SYSTEM TO GENERATE OXYGEN AND WATER
Yoshitsugu Sone, Japan Aerospace Exploration Agency (JAXA), ISAS, Japan

IAC-18.D3.2.2
POWERING SPACE: THE POTENTIAL ROLE OF SOLAR POWER IN EXPLORATION, DEVELOPMENT AND SETTLEMENT
John C. Mankins, ARTEMIS Innovation Management Solutions, LLC, United States

IAC-18.D3.2.3
THE FIRST COMMERCIAL AIRLOCK MODULE: BUILDING THE COMMERCIAL SPACE MARKET
Brock Howe, Nanoracks, United States

IAC-18.D3.2.4
A BIOLOGICAL NUTRIENT CYCLE FOR A PARTIALLY SELF-SUFFICIENT COLONY
Benjamin Lehner, TU Delft, The Netherlands

IAC-18.D3.2.5
GATEWAY EARTH TAKING OFF: DETAILING INFRASTRUCTURE AND MISSION LOGISTICS
Matjaz Vidmar, The University of Edinburgh, United Kingdom

IAC-18.D3.2.6
MARS IN-SITU WATER EXTRACTION WHILE PREPARING A HARDENED LANDING ZONE
Stan Kaethler, International Space University (ISU), Canada

IAC-18.D3.2.7
BENEFITS AND APPROACHES OF ARTIFICIALLY INDUCING GRAVITY IN DEEP-SPACE HABITATS UTILIZING TORPOR
John Bradford, SpaceWorks Enterprises, Inc., United States

IAC-18.D3.2.8
MARS EXPEDITION RESUPPLY NODES [MERN]: DESIGN OF REUSABLE, TRANSPORTABLE IN SITU RESOURCE UTILISATION MODULES FOR SUSTAINABLE MARTIAN INFRASTRUCTURE
Hamish McPhee, The University of Adelaide, Australia

IAC-18.D3.2.9
SPACE BASED ELECTRICITY SYSTEM BY USING MARTIAN DUST STORMS
Shivangi Chauhan, University of Petroleum and Energy Studies, India

IAC-18.D3.2.10
CONCEPTUAL DESIGN OF A HIGH-POWER SOLAR-ELECTRIC TRANSPORTATION SYSTEM FOR MARS EXPLORATION
Steffen Callsen, Bremen University of Applied Sciences, Germany

IAC-18.D3.2.11
MICRO-SATELLITES FOR INTERPLANETARY AND DEEP SPACE EXPLORATION – POTENTIAL, LIMITATIONS, AND CAPABILITIES
Piotr Perczynski, OHB System AG, Germany

IAC-18.D3.2.12
FUTURE SPACE MISSIONS WITH RECONFIGURABLE MODULAR PAYLOAD MODULES AND STANDARD INTERFACE – AN OVERVIEW OF THE SIROM PROJECT
JAVIER VINALS, SENER Ingenieria y Sistemas, S.A., Spain

IAC-18.D3.2.13
STRATEGIC DESIGN RESEARCH AND MASTER PLANNING FOR CONSTRUCTION OF COMPLEX INFRASTRUCTURE
Paivi Jukola, Aalto University, Finland

D3.3. Novel Concepts and Technologies to Enable Future Building Blocks in Space Exploration and Development

October 3 2018, 14:45 — Bremen 1

Co-Chair(s): *Alain Pradier , European Space Agency (ESA), The Netherlands; Christopher Moore , National Aeronautics and Space Administration (NASA), United States;*
Rapporteur(s): *Alain Dupas , European Bank for Reconstruction and Development, France; Junjiro Onoda , Japan Society for Aeronautics and Space Sciences (JSASS), Japan;*

IAC-18.D3.3.1
MARS PROSPECTOR: LEADING THE WAY TO IN-SITU RESOURCE UTILIZATION ON THE RED PLANET
Wayne Sidney, Laboratory for Atmospheric and Space Physics (LASP) at University of Colorado, United States

IAC-18.D3.3.2
AUTONOMOUS MULTI-MODE ROVER NAVIGATION FOR LONG-RANGE PLANETARY EXPLORATION USING ORBITAL AND LOCALLY PERCEIVED DATA
Róbert Marc, Airbus Defence and Space, United Kingdom

IAC-18.D3.3.3
VALIDATION OF THE I3DS: SUITE OF SENSORS FOR ORBITAL AND PLANETARY MISSIONS
Sabrina Andiappane, Thales Alenia Space – France, France

IAC-18.D3.3.4
CRITICAL ASSESSMENT OF IN-SPACE ASSEMBLY AND MANUFACTURING VIABILITY AS APPLIED TO NEW MISSIONS
Lauren Smith, Northrop Grumman Aerospace Systems, United States

IAC-18.D3.3.5
DISCUSSION ON BOTTLENECK AND COUNTERMEASURE OF IN-SPACE ASSEMBLY TECHNOLOGY
Ling-bin ZENG, Shanghai Aerospace System Engineering Institute, China

IAC-18.D3.3.6
A RECONFIGURABLE COMMUNICATION ARCHITECTURE FOR MODULAR SATELLITES
Dung Tham, TU Berlin, Germany

IAC-18.D3.3.7
URBAN:CONCEIVING A LUNAR BASE USING 3D PRINTING TECHNOLOGIES
Antonella Sgambati, OHB System AG-Bremen, Germany

IAC-18.D3.3.8
FULL-SCALE TERRESTRIAL DEMONSTRATOR FOR LUNAR ILMENITE REDUCTION WITH CONCENTRATED SOLAR POWER
Thorsten Denk, CIEMAT-Plataforma Solar de Almería, Spain

IAC-18.D3.3.9
BIOREACTOR DESIGN TO PERFORM MICROBIAL MINING ACTIVITIES ON ANOTHER CELESTIAL BODY
Benjamin Lehner, TU Delft, The Netherlands

IAC-18.D3.3.10
SPACE BOK – EXPLORING LEGGED JUMPING LOCOMOTION FOR SPACE EXPLORATION
Philip Arm, ETHZ, Switzerland

IAC-18.D3.3.11
STEREO, HIGH-RESOLUTION AND THERMAL CAMERA DESIGN FOR INTEGRATION INTO THE I3DS SENSOR SUITE FOR FUTURE ROBOTICS MISSIONS
Chris van Dijk, Cosine Research BV, The Netherlands

IAC-18.D3.3.12
PERFORMANCE DATA PROCESSOR (HPDP) – A NEW GENERATION SPACE PROCESSOR BECOMES REAL
Ingo Saenger, Airbus DS GmbH - HE Space, Germany

IAC-18.D3.3.13
ON-BOARD SPECTRUM ANALYSIS (SIGINT/COMINT) OR SAR ON-BOARD PROCESSING WITH FULL FLOATING POINT FFT-PROCESSING NOW READY FOR LIFT-OFF.
Bert-Johan Vollmuller, National Aerospace Laboratory (NLR), The Netherlands

D3.4. Space Technology and System Management Practices and Tools

October 4 2018, 14:45 — Bremen 1

Co-Chair(s): *John C. Mankins , ARTEMIS Innovation Management Solutions, LLC, United States; Paivi Jukola , Aalto University, Finland;*
Rapporteur(s): *Maria Antonietta Perino , Thales Alenia Space Italia, Italy;*

IAC-18.D3.4.1
LOOSENING OUR GRIP ON INNOVATION: ENCOURAGING CHANGE IN MILITARY SPACE TECHNOLOGY
Claire Wilhelm, Space Policy Institute, George Washington University, United States

IAC-18.D3.4.2
PLUG AND PLAY OPTIMIZATION FOR ADVANCED CONCEPTS MODELLING TOOLS
Johannes Norheim, Massachusetts Institute of Technology (MIT), United States

IAC-18.D3.4.3
TOWARDS UAE'S SPACE SCIENCE, TECHNOLOGY AND INNOVATION ROADMAP
Khaled Al Hashmi, UAE Space Agency, United Arab Emirates

IAC-18.D3.4.4
PROCUREMENT CHALLENGES AND LESSONS LEARNED IN THE FRAME OF SATELLITE DEVELOPMENT PHASES
Antonio Accettura, OHB System AG - Munich, Germany

IAC-18.D3.4.5
THE ESCC QPL TOOL: FORTY YEARS OF QUALIFIED COMPONENT IN SPACE
Anastasia Pesce, ESA, The Netherlands

IAC-18.D3.4.6
A HARDWARE DEVELOPMENT TOOL STACK FOR FUTURE SPACE EXPLORATION - TOOL SELECTION CRITERIA
Louise Lindblad, Valispace, Germany

IAC-18.D3.4.7
A RENEWED INVESTIGATION OF PREDICTORS OF CONTINUING TECHNOLOGY DEVELOPMENT EFFORTS IN NASA'S CENTER INNOVATION FUND (CIF) PROGRAM
Stephanie Booth, Bryce Space and Technology, United States

IAC-18.D3.4.9
TRLS FOR DESIGN-ENGINEERING OF TOMORROW
Paivi Jukola, Aalto University, Finland

IAC-18.D3.4.10
DISRUPTIVE R&D IN THE SPACE SECTOR
Stefano Ferretti, European Space Policy Institute (ESPI), Austria

IAC-18.D3.4.11
IS IT POSSIBLE TO BE SPACE AGILE? A NEW APPROACH FOR SPACE MISSION DESIGN AND IMPLEMENTATION THROUGH AN HYBRID AGILE METHODOLOGY
Walter Calles, , Mexico

IAC-18.D3.4.12
A VVT APPROACH FOR REDUCING SYSTEM DEVELOPMENT TIME GUIDED BY REQUIRED MATURITY AND ACCEPTANCE LEVEL: A CASE STUDY OF NANOSATC-BR2 PROJECT
Jeanne Samara S Lima, Instituto Nacional de Pesquisas Espaciais (INPE), Brazil

IAC-18.D3.4.13
FIPS NETWORK APLICATION
Francesco De Rose, ArianeGroup, Germany

D4. 16th IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE

Coordinator(s): *Giuseppe Reibaldi , Moon Village Association, France; Yu Lu , China Academy of Launch Vehicle Technology, China, China;*

D4.1. Innovative Concepts and Technologies

October 2 2018, 09:45 — Bremen 1

Co-Chair(s): *Giorgio Saccoccia , European Space Agency (ESA), The Netherlands; Roger X. Lenard , LPS, United States;*
Rapporteur(s): *Xiaowei WANG , China Academy of Launch Vehicle Technology (CALT), China;*

IAC-18.D4.1.1
DEVELOPMENT OF NATURE INSPIRED ASTRONAUTIC AND AERONAUTIC TECHNOLOGY THROUGH THE PERIODIC TABLE OF LIFE (PETAL)
Nicholas Bense, NASA Glenn Research Center, United States

IAC-18.D4.1.2 (non-confirmed)
3-D IMAGING SYSTEMS AND SPACE MISSIONS IN THE 21ST CENTURY
Valery D. Petrov, , Germany

IAC-18.D4.1.3
ADVANCED ROBOTIC SYSTEMS IN THE CONTEXT OF FUTURE SPACE EXPLORATION
Wiebke Brinkmann, DFKI Robotics Innovation Center Bremen, Germany

IAC-18.D4.1.4
FROM 2001: A SPACE ODYSSEY TO TOMORROW'S REALITY: EVOLVING ARTIFICIAL GRAVITY THROUGH STRATEGIC DEVELOPMENT
Emily Petersen, Purdue University, United States

IAC-18.D4.1.5
DYNAMIC SIMULATION AND EXPERIMENT OF ELECTROMAGNETIC FLEXIBLE DEPLOYMENT FOR LARGE SPACECRAFT STRUCTURE
Jun Jiang, Shanghai Engineering Center for Microsatellites, Chinese Academy of Sciences (CAS), China

IAC-18.D4.1.7
PROJECTION-BASED VISUALIZATION TECHNOLOGY AND ITS DESIGN IMPLICATIONS IN SPACE HABITATS
Olga Bannova, University of Houston, United States

IAC-18.D4.1.8
SYSTEM ARCHITECTURE AND GNC ALGORITHMS FOR LUNAR SURFACE PRECISION LANDING AND TRANSFER TRAJECTORIES OPTIMIZATION
Karim Hacene Lhadj, Politecnico di Torino, Italy

IAC-18.D4.1.11
USES OF THE BLOCKCHAIN TECHNOLOGY IN SPACE 4.0
Lukas Plazovnik, , Austria

IAC-18.D4.1.12
THEORY AND APPLICATION OF DEEP NEURAL NETWORKS IN FUTURE DEEP SPACE AUTONOMOUS EXPLORATION MISSION
Jie Zhang, Shanghai Insitute of Satellite Engineering, China

IAC-18.D4.1.13
USING DEEP LEARNING FOR SPACE OBJECT POSE DETECTION
Huo Yurong, Academy of Equipment, China

IAC-18.D4.1.14
TOPOLOGICAL STRUCTURE DESIGN OF NON-CONTACTING FLUX-PINNED INTERSATELLITE CONNECTION WITH PASSIVE STABILITY
Qingyun Mao, Shanghai Engineering Center for Microsatellites, China

IAC-18.D4.1.15
STUDY OF VARIOUS SENSOR AND BIO SENSORS BASED APPLICATIONS FOR MARS
SOURAV KARMAKAR, , India

IAC-18.D4.1.16
ROAD MAP TO THE STARS: ANTICIPATED AND REQUIRED TECHNOLOGY BREAKTHROUGHS MILESTONES
Antoine Faddoul, Tony Sky Designs Group, United States

IAC-18.D4.1.17
SENTIENCE
Nishanth Mudkey, , Australia

IAC-18.D4.1.18 (non-confirmed)
A SPACE SETTLEMENT MODULAR CONSTRUCTION SYSTEM
Giorgio Gaviraghi, Unispace Exponential Creativity, Italy

IAC-18.D4.1.19 (non-confirmed)
FROM THE EARTH TO THE MOON BY GONDOLA
Jean-Yves Prado, PLATINEO, France

D4.2. Contribution of Space Activities to Solving Global Societal Issues

October 3 2018, 09:45 — Bremen 1

Co-Chair(s): *Giuseppe Reibaldi , Moon Village Association, France; Yu Lu , China Academy of Launch Vehicle Technology, China, China;*
Rapporteur(s): *Paivi Jukola , Aalto University, Finland;*

IAC-18.D4.2.1
GALILEO AND COPERNICUS FOR ALL MANKIND
Vera Pinto Gomes, European Commission, Belgium

IAC-18.D4.2.2
A ROADMAP FOR THE AUSTRALIAN SPACE INDUSTRY TO CONTRIBUTE TO GLOBAL SOCIETAL CHALLENGES
Warren Flentje, CSIRO, Australia

IAC-18.D4.2.3
AN AFRICAN COUNTRY FIRST SATELLITE AND SPACE STRATEGY: THEIR ROLE IN ADDRESSING GLOBAL SOCIETAL CHALLENGES THROUGH OUTER SPACE
Magda Cocco, Vieira de Almeida & Associados, Portugal

IAC-18.D4.2.4
THE IMPACT OF SPACE ECONOMY ON CHINA'S SOCIAL DEVELOPMENT
Mu YANG, China Great Wall Industry Corporation (CGWIC), China

IAC-18.D4.2.5
CHINA'S SPACE PROGRAMME - BORN OUT OF NATIONAL NEEDS POISED TO SUPPORT GLOBAL PROGRESS
Jacqueline Myrrhe, Journalist, Germany

IAC-18.D4.2.6
OBSERVING THE SUSTAINABLE DEVELOPMENT GOALS (SDGS) IN MARS ANALOG HABITATS
Julio Rezende, Brazilian Space Agency (AEB), Brazil

IAC-18.D4.2.7
GREATER EARTH SOLUTIONS TO TERRESTRIAL PROBLEMS
Arthur R. Woods, Ars Astronautica, Switzerland

IAC-18.D4.2.8
PUBLIC SPACE HEALTH: CONCEPT OF HEALTHIER SOCIETIES IN THE AGE OF SPACE TOURISM
Olga Sokolova, Peter the Great St. Petersburg Polytechnic University, Switzerland

IAC-18.D4.2.9
SPACE EXPLORATION IN VIEW OF TERRESTRIAL CHALLENGES; PROTECTION OF RESOURCES BY CLOSE-LOOP PROCESSES
Klaus Bockstahler, Airbus Defence & Space, Space Systems, Germany

IAC-18.D4.2.11
THE DISSEMINATION OF KNOWLEDGE AND THE CONSOLIDATION OF A PEDAGOGY FOR THE SOLUTION OF SOCIAL PROBLEMS AT THE GLOBAL LEVEL.
Pilar Zamora, , Colombia

IAC-18.D4.2.12
BUILDING IN SPACE: FIRST STEPS IN CIVIL EXPANSION BEYOND EARTH
Adriano Autino, Space Renaissance International, Italy

IAC-18.D4.2.13
TOWARDS A SELF-SUSTAINABLE PRODUCTION OF PROTEINS IN SPACE: A PROPOSED SOLUTION AND ROADMAP
Francesco Spina, Luleå University of Technology, Sweden

IAC-18.D4.2.14
LIVING LABORATORIES: EXTENDING THE BIOSPHERE TO SPACE?
Matjaz Vidmar, The University of Edinburgh, United Kingdom

D4.3. Conceptualizing Space Elevators and Tethered Satellites

October 4 2018, 09:45 — Bremen 1

Co-Chair(s): *Akira Tsuchida , International Academy of Astronautics (IAA), Japan; Peter Swan , International Space Elevator Consortium, United States;*
Rapporteur(s): *Yoji Ishikawa , Obayashi Corporation, Japan;*

IAC-18.D4.3.1
GALACTIC HARBOUR DUALITY – ENTERPRISE AND INFRASTRUCTURE
Peter Swan, International Space Elevator Consortium, United States

IAC-18.D4.3.2
NON-TECHNOLOGICAL RISK ABSTRACTION AND CONSIDERATION FOR SPACE ELEVATOR DEVELOPMENT
Akira Tsuchida, International Academy of Astronautics (IAA), Japan

IAC-18.D4.3.3
SURVIVABILITY OF CARBON NANOTUBES IN SPACE
Yoji Ishikawa, Obayashi Corporation, Japan

IAC-18.D4.3.4
MAINTAINING STABILITY OF THE MULTI-STAGE SPACE ELEVATOR
John Knapman, , United Kingdom

IAC-18.D4.3.5
ATMOSPHERIC ELECTRICITY MODULATION CAUSED BY SPACE ELEVATOR
Masashi Kamogawa, , Japan

IAC-18.D4.3.6
PROPOSALS FOR GROWING SPACE ELEVATOR TRL BY OPERATION OF DEMONSTRATOR SYSTEMS
Peter Robinson, , United Kingdom

IAC-18.D4.3.7
A JOURNEY OF STUDENT SPACE ELEVATOR DEVELOPMENT
Tim Wiese, WARR, Germany

IAC-18.D4.3.9
A STUDY OF MARINE NODE IN CONSTRUCTION STAGE OF THE SPACE ELEVATOR
Takeyuki Fukazawa, , Japan

IAC-18.D4.3.10
OPTIMUM CONTROL OF CABLE DEPLOYMENT OF SPACE ELEVATOR FROM GEO STATION IN TWO DIRECTIONS
Yoshiki Yamagiwa, Shizuoka University, Japan

IAC-18.D4.3.11
DESIGN AND DEVELOPMENT OF THE TETHER MOVING SYSTEM USING NANOSATELLITE
Daichi Murakami, Nihon University, Japan

IAC-18.D4.3.12
EXPERIMENT STUDY OF CLIMBER MECHANISM WITH CROSS ROLLER SYSTEM FOR HEAVY LOAD IN SPACE ELEVATOR
Fumihiro Inoue, Shonan Institute of Technology, Japan

IAC-18.D4.3.13
LINEAR DIRECT DRIVE MOTOR MECHANISM FOR USE IN TETHERED SATELLITES
Jun Maeda, Nihon University, Japan

IAC-18.D4.3.14
ORBITAL MOTION OF VERY LONG SYSTEMS
Tetsuo Yasaka, QPS Institute, Japan

IAC-18.D4.3.15
THE EFFECTS OF PAYLOAD TRANSPORTATION ON THE TETHERED SYSTEMS IN LOW EARTH ORBIT
Shun Yokota, Nihon University, Japan

IAC-18.D4.3.16
CONDUCTIVE TETHER PATTERNING FOR TETHERED SATELLITE APPLICATIONS
DARREN COSTE, Nihon University, Japan

IAC-18.D4.3.17
MARS LIFT UPDATE
Martin Lades, , Germany

IAC-18.D4.3.18
DISASSEMBLY OF NEAR EARTH ASTEROIDS BY LEVERAGING ROTATIONAL SELF-ENERGY
Andrea Viale, University of Glasgow, United Kingdom

D4.4. Strategies for Rapid Implementation of Interstellar Missions: Precursors and Beyond

October 5 2018, 09:45 — Bremen 1

Co-Chair(s): Giancarlo Genta , Politecnico di Torino, Italy; Mae Jemison , 100 Year Starship, United States;
Rapporteur(s): Emeline De Antonio , Centre National d'Etudes Spatiales (CNES), France;

IAC-18.D4.4.1
IN-SITU INVESTIGATION OF THE INTERSTELLAR MEDIUM
Robert F. Wimmer-Schweingruber, University of Kiel, Germany

IAC-18.D4.4.2
NEAR-TERM INTERSTELLAR PROBE: FIRST STEP
Ralph L. McNutt, Jr., Johns Hopkins University Applied Physics Laboratory, United States

IAC-18.D4.4.3
DECELERATING INTERSTELLAR PROBES WITH MAGNETIC SAILS
Claudius Gros, University of Frankfurt am Main, Germany

IAC-18.D4.4.5
CHARACTERIZATION OF A NON-STATIONARY SPHERICAL INFLATED LIGHT SAIL FOR ULTRA-FAST INTERSTELLAR TRAVEL BY USING COMMERCIAL 3D CODES
Dario Riccobono, Politecnico di Torino, Italy

IAC-18.D4.4.6
PROJECT GLOWWORM: TESTING LASER SAIL PROPULSION IN LEO
Zachary Burkhardt, International Space University (ISU), United States

IAC-18.D4.4.7
USING GRAPHENE INTERSTELLAR SOLAR PHOTON SAILS: SENSITIVITY STUDIES FOR PICO-PROBES AND ARKS
Gregory Matloff, New York City College of Technology, United States

IAC-18.D4.4.8
CASE STUDY OF AN INTERSTELLAR MISSION TO TAU CETI: UNMANNED INTERSTELLAR PROBE USING GAS CORE NUCLEAR REACTORS WITH EARLY 21ST CENTURY TECHNOLOGY
Ugur Guven, UN CSSTEAP, United States

IAC-18.D4.4.9
DYNAMIC ANALYSIS OF SPACE TETHER SYSTEM WITH SLIDING BEAD-CAPSULE FOR PAYLOAD DELIVERY
Vladimir S. Aslanov, Samara National Research University, Russian Federation

IAC-18.D4.4.10
PATENT MANAGEMENT FOR SPACE STRUCTURES
Atsuya TAKESHITA, CABINET PLASSERAUD, France

IAC-18.D4.4.11
MULTI-TETHERED MANEUVERS FOR A SPACECRAFT PASSING NEAR THE MOON
Antonio Fernando Bertachini Almeida Prado, Instituto Nacional de Pesquisas Espaciais (INPE), Brazil

IAC-18.D4.4.12
THE PHOBOS L-1 OPERATIONAL TETHER EXPERIMENT
Kevin Kempton, NASA, United States

IAC-18.D4.4.13
LARGE TETHER SYSTEMS AND ISS REUSE
Zachary Burkhardt, International Space University (ISU), United States

IAC-18.D4.4.14
MEDIUM EARTH-ORBIT TETHER EXTENDING OUR REACH
Nisheet Singh, International Space University (ISU), France

D4.5. Space Resources: Technologies, Systems, Missions and Policies

October 5 2018, 13:30 — Bremen 1

Co-Chair(s): *Peter Swan , International Space Elevator Consortium, United States; Roger X. Lenard , LPS, United States;*
Rapporteur(s): *Helen Tung , Moon Village Association, Australia;*

IAC-18.D4.5.1
COMMERCIAL LUNAR CRATER PROSPECTOR ARCHITECTURE AND ECONOMIC ASSESSMENT
Roger X. Lenard, LPS, United States

IAC-18.D4.5.2
COMMERCIAL LUNAR RESOURCE EXTRACTION SUPPLYING A LEO PROPELLANT DEPOT
Roger X. Lenard, LPS, United States

IAC-18.D4.5.3
TECHNOLOGIES AND OPPORTUNITIES FOR COMMERCIAL UTILIZATION OF MOON WATER
Bozhidar Bahov, Space Mining Technologies, The Netherlands

IAC-18.D4.5.4
A CASE STUDY FOR A LUNAR BASE SUPPORTING A LEO PROPELLANT DEPOT
Emeline De Antonio, Centre National d'Etudes Spatiales (CNES), France

IAC-18.D4.5.5
NEAR-EARTH ASTEROIDS UTILIZATION AS A BASE FOR BUILDING OF EARTH-MARS-MOON ECONOMY
Shamil Biktimirov, Skolkovo Institute of Science and Technology, Russian Federation

IAC-18.D4.5.6
MARS GAS STATION: TRANSITION FROM INDEPENDENT MISSIONS OF PROPELLANT PRODUCTION HARDWARE TO EXTRATERRESTRIAL "GAS STATIONS" SUPPORTING REUSABLE LANDERS
Stan Kaethler, International Space University (ISU), Canada

IAC-18.D4.5.7
GROUND ICE RESOURCES OF THE PROTONILUS MENSAE
Sophia Casanova, University of New South Wales, Australia

IAC-18.D4.5.8 (non-confirmed)
CHARACTERIZING LUNAR SIMULANT BP-1 WITH EXPERIMENTAL AND SIMULATION FORCE COMPARISONS
Andrew Thoesen, Arizona State University, United States

IAC-18.D4.5.9
LEGALITY OF SPACE PRODUCT: RIGHTS AND OBLIGATIONS ARISING FROM SPACE MINING ACTIVITIES
Yangzi Tao, Keio University, Japan

IAC-18.D4.5.10
EXTRACTION OF IRON AND SILICON FROM REGOLITH SIMULANTS USING A MICROBIAL APPROACH IN COMBINATION WITH 3D PRINTING TECHNOLOGY
Jesica Urbina, NASA Ames Research Center, United States

IAC-18.D4.5.11
EXPLORING POTENTIAL ENVIRONMENTAL BENEFITS OF ASTEROID MINING
Andreas Makoto Hein, Ecole Centrale de Paris, France

IAC-18.D4.5.12
EXPLORATION OF KUIPER BELT AND USING ITS AS A POSSIBLE OUTPOST FOR FUTURE SPACE MISSIONS AND UTILISATION OF ITS RESOURCES FOR FURTHER PROPULSION OF SPACECRAFTS
Shivangi Chauhan, University of Petroleum and Energy Studies, India

IAC-18.D4.5.13
LEGAL CONSIDERATIONS ON THE EXPLOITATION OF SPACE RESOURCES
Ermanno Napolitano, McGill Univeristy, Canada

IAC-18.D4.5.14
A TECHNO-ECONOMIC ANALYSIS OF ASTEROID MINING
Andreas Makoto Hein, Ecole Centrale de Paris, France

IAC-18.D4.5.15
LOGISTICS PROBLEMS IN THE DESIGN OF AN ASTEROID MINING INDUSTRY
Scott Dorrington, UNSW Australia, Australia

IAC-18.D4.5.16
LAUNCH STATUS CHECK: COMMERCIAL SPACE PROSPECTING IN 2018
Austin Murnane, , United States

IAC-18.D4.5.17
CONCENTRATED RESOURCES ON THE MOON: POLICY AND LEGAL CONSTRAINTS
Martin Elvis, Harvard-Smithsonian Center for Astrophysics (CfA), United States

IAC-18.D4.5.18
SPACE FOUNDRY: RECYCLING SPACE DEBRIS INTO RAW MATERIALS FOR IN-SPACE USE
Jan Walter Schroeder, CisLunar Industries, Germany

D5. 51st IAA SYMPOSIUM ON SAFETY, QUALITY AND KNOWLEDGE MANAGEMENT IN SPACE ACTIVITIES

Coordinator(s): *Jeanne Holm , University of California, United States; Roberta Mugellesi-Dow , European Space Agency (ESA), United Kingdom;*

D5.1. Quality and safety, a challenge for traditional and new space

October 2 2018, 14:45 — Bremen 2

Co-Chair(s): *Alexander S. Filatyev , Central AeroHydrodynamic Institute (TsAGI), Russian Federation; Manola Romero , 3AF, France;*
Rapporteur(s): *Pierre Molette , , France;*

IAC-18.D5.1.1
A CONCEPT FOR SYSTEM INTEGRATION OF GROUND BASED SPACE INFRASTRUCTURE OF COSMODROME IN ORDER TO PROVIDE QUALITY AND SAFETY AT ROCKET LAUNCH
Igor Barmin, Center for Ground Space Infrastructure Operation (FGUP TsENKI), Russian Federation

IAC-18.D5.1.2
A FRAMEWORK FOR SAFE SYSTEM DESIGN IN SPACE LAUNCH VEHICLES
Barret Schlegelmilch, Massachusetts Institute of Technology (MIT), United States

IAC-18.D5.1.4
MATRIOCHKA SPACE PROJECT D5.1
Pierre GABRIELLI, ESTACA, France

IAC-18.D5.1.5
SPACECRAFT SAFETY IN VERY LOW EARTH ORBITS
Alexander Golikov, Central AeroHydrodynamic Institute (TsAGI), Russian Federation

IAC-18.D5.1.6
CHALLENGES FOR CUBESATS SAFETY DESIGN AND VERIFICATION TO DO LEAN SATELLITE DEVELOPMENT
Mengu Cho, Kyushu Institute of Technology, Japan

IAC-18.D5.1.7
RESEARCH AND APPLICATION OF MACHINE-LEARNING-ORIENTED SPACECRAFT HEALTH MANAGEMENT PLATFORM
Kai Luo, China Aerospace Science & Industry Academy, China

IAC-18.D5.1.8
RESEARCH ON SPACECRAFT PERFORMANCE DEGRADATION BASED ON TELEMETRY DATA
WEI XU, Science and Technology on Space Physics Laboratory, China

IAC-18.D5.1.9
CAST ANALYSIS OF THE INTERNATIONAL SPACE STATION EVA 23 SUIT WATER INTRUSION MISHAP
Akshay Kothakonda, Massachusetts Institute of Technology (MIT), United States

IAC-18.D5.1.10 (non-confirmed)
RISK MANAGEMENT FOR THE REAL-TIME LAUNCHING CALIBRATION SYSTEM INSIDE THE HARDWARE DESIGN AND FAILURE ANALYSIS APPROACH (FTA & MARKOV CHAINS) FOR THE REAL-TIME MEXICAN SATELLITE SPACE LAUNCH CENTER
Omar Ariosto Niño Prieto, OneSide Tech, Mexico

IAC-18.D5.1.11
RELIABILITY PREDICTION OF STUDENT-BUILT CUBESATS
Michael Weisgerber, Technical University of Munich, Germany

IAC-18.D5.1.12
FORMAL VERIFICATION TECHNIQUES ON SPACECRAFT EMBEDDED OPERATING SYSTEMS
Lei Qiao, Beijing Institute of Control Engineering, China Academy of Space Technology (CAST), China

D5.2. Knowledge management for space activities in the digital era

October 3 2018, 09:45 — Bremen 2

Co-Chair(s): *Patrick Hambloch , University of Alabama in Huntsville, United States; Roberta Mugellesi-Dow , European Space Agency (ESA), United Kingdom;*
Rapporteur(s): *Jeanne Holm , University of California, United States;*

IAC-18.D5.2.1
FROM LIBRARIES TO ESA KNOWLEDGE AND LEARNING CENTRES: KEY FEATURES AND STATUS OF IMPLEMENTATION
Gianluigi Baldesi, European Space Agency (ESA), France

IAC-18.D5.2.2
DLR'S PROJECT DIRECTORY - A BASIS FOR STRATEGIC SUPPORT
André Pliewischkies, German Aerospace Center (DLR), Germany

IAC-18.D5.2.3
SHARING SEMANTIC RESOURCES AMONG THE SPACE COMMUNITY: A KNOWLEDGE MANAGEMENT ISSUE
Daniel Galarreta, Centre National d'Etudes Spatiales (CNES), France

IAC-18.D5.2.4
GENERATION OF THE ESA CORPORATE TAXONOMY
Jose A. Martinez Ontiveros, Immediait, Spain

IAC-18.D5.2.5
ONTOLOGY BASED COGNITIVE ASSISTANT FOR EARLY DESIGN OF SPACE MISSIONS
Audrey Berquand, University of Strathclyde, United Kingdom

IAC-18.D5.2.6
THE EUROPEAN COOPERATION FOR SPACE STANDARDIZATION - A UNIQUE APPROACH TO STANDARDIZATION - PAST, PRESENT AND FUTURE
Fabien CASTANET, Centre National d'Etudes Spatiales (CNES), France

IAC-18.D5.2.8
BRINGING SPACE TECHNOLOGY TO THE ENERGY SECTOR: MANAGING INNOVATION ACROSS BOUNDARIES
Nathalie Kerstens, Eindhoven University of Technology, Belgium

IAC-18.D5.2.9
RISK AND KNOWLEDGE-INFORMED DECISION-MAKING FRAMEWORK
David M. Lengyel, George Washington University, United States

IAC-18.D5.2.10
POST-MORTEM INTEGRATED APPROACHES IN KNOWLEDGE MANAGEMENT AND SHARING
Vasilis Zervos, International Space University (ISU), France

IAC-18.D5.2.11
THE STUDY ON INTELLECTUAL PROPERTY MANAGEMENT AND TECHNOLOGY TRANSFER MECHANISM OF MICRO-SATELLITES IN CHINA
Yi Lu, Innovation Academy for Microsatellites of CAS, China

IAC-18.D5.2.13
KNOWLEDGE MANAGEMENT CASE STUDY FOR CRISIS RELIEVED DURING THE FORMOSAT-5 EARLY ORBIT OPERATION
Arthur Huang, National Space Organization, Taiwan, China

D5.3. Prediction, Testing, Measurement and Effects of space environment on space missions

October 4 2018, 14:45 — ZARM 3

Co-Chair(s): *Jean-Francois Roussel , Office National d'Etudes et de Recherches Aérospatiales (ONERA), France; Mengu Cho , Kyushu Institute of Technology, Japan;*
Rapporteur(s): *Carlos Soares , NASA Jet Propulsion Laboratory, United States;*

IAC-18.D5.3.1
MISSION ARCHITECTURE FOR A SPACE WEATHER MONITORING MISSION FROM THE SUN-EARTH LAGRANGE POINT L5
Marc Scheper, OHB System AG, Germany

IAC-18.D5.3.2
FRAUNHOFER SATELLITE RADIATION SENSING SYSTEMS
Stefan Metzger, Fraunhofer INT, Germany

IAC-18.D5.3.3
THE LASTED DATA RESULTS OF SPACE ENVIRONMENT MONITORING SYSTEM IN NEW GENERATION GEOSTATIONARY METEOROLOGICAL SATELLITE OF CHINA
Xin Zhang, National Space Science Center, Chinese Academy of Sciences, China

IAC-18.D5.3.4
HORYU-IV FLIGHT RESULTS OF SPACECRAFT PLASMA INTERACTION EXPERIMENTS
Mengu Cho, Kyushu Institute of Technology, Japan

IAC-18.D5.3.5
OHB'S PROPOSAL OF AN IN-ORBIT CROSS-CALIBRATION OF SPACE ENVIRONMENT SENSORS
Johan Ideström, OHB System AG-Bremen, Germany

IAC-18.D5.3.6
PREPARING FOR PLANETARY SURFACE EXPLORATION BY MEASURING HABITAT DUST INTRUSION WITH FILTER TESTS DURING AN ANALOGUE MARS MISSION
Ryan L. Kobrick, Embry Riddle Aeronautical University, United States

IAC-18.D5.3.7
GROOVE – A NOVEL, COST EFFECTIVE ON ORBIT VERIFICATION POSSIBILITY FOR SPACE HARDWARE
Walter Ballheimer, German Orbital Systems GmbH, Germany

IAC-18.D5.3.8
REMOVING INNOVATION BARRIERS THROUGH OPEN ACCESS TEST FACILITIES; INSIGHTS INTO WHOLE SYSTEM AND SUBSYSTEM TESTING, MEASUREMENT AND CALIBRATION INFRASTRUCTURE AT THE NEW NATIONAL SATELLITE TEST CENTRE.
Robert Elliott, STFC, United Kingdom

IAC-18.D5.3.10
FIRE SAFETY IN HUMAN SPACE FLIGHT – RESEARCH FOR IMPROVED STANDARDS
Christian Eigenbrod, University of Bremen - ZARM, Germany

IAC-18.D5.3.11
A DECISION MAKING TOOL FOR PROCUREMENT MANAGEMENT OF AEROSPACE EEE PARTS
Read AlMheiri, Mohammed Bin Rashid Space Centre (MBRSC), United Arab Emirates

D5.3. Cyber-Security Threats To Space Missions And Countermeasures To Address Them

October 5 2018, 13:30 — ZARM 3

Co-Chair(s): *Stefano Zatti , ESA, Italy;*
Rapporteur(s): *Luca del Monte , European Space Agency (ESA), France;*

IAC-18.D5.4.1
EUROPE'S MANAGEMENT OF UNCONVENTIONAL THREATS TO SPACE OPERATIONS
Jana Robinson, The Prague Security Studies Institute, Czech Republic

IAC-18.D5.4.2
RESEARCHING ON SATELLITES TECHNOLOGY IN CYBERSPACE THREATS
LIWEI WANG, Beijing Institute of Space Launch Technology, China

IAC-18.D5.4.3
WHAT SPACE MISSIONS CAN LEARN FROM CYBER-SECURITY BREACHES (AND COUNTER-MEASURES) IN THE TELECOMMUNICATIONS INDUSTRY
Scott Millwood, , The Netherlands

IAC-18.D5.4.4
QUANTUM KEY DISTRIBUTION USING SPACE-BASED PHOTON SOURCES
Robert Bedington, S-Fifteen Space Systems, Singapore, Republic of

IAC-18.D5.4.5
SMALLSAT CONSTELLATIONS, DATA AND CYBER SECURITY
Helen Tung, Moon Village Association, Australia

D6. IAF SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES

Coordinator(s): *Christophe Chavagnac , Airbus Defence and Space SAS, France; John Sloan , Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States;*

D6.1. Commercial Space Flight Safety and Emerging Issues

October 3 2018, 09:45 — ÖVB 4

Co-Chair(s): *Christophe Chavagnac , Airbus Defence and Space SAS, France; John Sloan , Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States;*
Rapporteur(s): *Gennaro Russo , Associazione Italiana di Aeronautica e Astronautica (AIDAA), Italy;*

IAC-18.D6.1.1
UK REGULATORY REFORM – ENABLING COMMERCIAL SPACEFLIGHT FROM THE UK BY THE EARLY 2020'S
Andrew Ratcliffe, UK Space Agency, United Kingdom

IAC-18.D6.1.2
LAUNCHUK - POTENTIAL FOR PROFITABLE SPACEPORT OPERATIONS
Adam Baker, UK Launch Services Ltd (UKLSL), United Kingdom

IAC-18.D6.1.3
"ONE-STOP" SPACE SAFETY REGULATION: SHOULD WE DO IT AND HOW?
Michail Chatzipanagiotis, , Cyprus

IAC-18.D6.1.4
COST REDUCTION SOLUTIONS IN REGARDS TO PLANETARY PROTECTION FOR COMMERCIAL COMPANIES
Ryan Babb, , United States

IAC-18.D6.1.5 (non-confirmed)
FAA LICENSING AND THE NASA COMMERCIAL CREW PROGRAM
John Sloan, Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States

IAC-18.D6.1.6
THE RELEVANCY OF CORPORATE SOCIAL RESPONSIBILITY (CSR) AS AN IMPLEMENTATION CONTEXT FOR INDUSTRY-CONSENSUS PRINCIPLES FOR RESPONSIBLE SPACE OPERATIONS
Ian Christensen, Secure World Foundation, United States

IAC-18.D6.1.7
ENABLING A SAFE & RELIABLE SPACE TRAFFIC MANAGEMENT SYSTEM
Stuart Baskcomb, Delta System Solutions GmbH, Germany

IAC-18.D6.1.8
INTEGRATION OF EMERGING TECHNOLOGIES TO ENABLE FREQUENT, ROUTINE OPERATIONS OF COMMERCIAL SPACE TRANSPORTATION VEHICLES IN THE NATIONAL AIRSPACE
Nickolas Demidovich, Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States

IAC-18.D6.1.9
INVESTIGATION ON SAFE AND ECO-FRIENDLY RE-ENTRY AREAS FOR POTENTIAL SUBORBITAL PARABOLIC FLIGHTS OVER EUROPEAN SEAS
Kai Höfner, GAIA Aerospace, Germany

IAC-18.D6.1.10
UNITED KINGDOM'S APPROACH TO REGULATING COMMERCIAL SPACEFLIGHT SAFETY
Damian M. Bielicki, Kingston University, United Kingdom

D6.2-D2.9. Safe Transportation Systems for Sustainable Commercial Human Spaceflight / Small Launchers: Concepts and Operations (Part II)

October 5 2018, 13:30 — CCB Lloydsaal

Co-Chair(s): *Aline Decadi , HE Space Operations, France; Martin Sippel , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Charles E. Cockrell Jr. , National Aeronautics and Space Administration (NASA), United States;*

IAC-18.D6.2-D2.9.1
EVOLUTION OF CREW SAFETY CRITERIA FOR FUTURE SPACE TRANSPORTATION SYSTEMS
Aline Decadi, HE Space Operations, France

IAC-18.D6.2-D2.9.2
FROM AVIATION TOURISM TO SUBORBITAL SPACE TOURISM: A STUDY AND DISCUSSION ON TOURIST SCREENING CRITERIA AND BUSINESS OPPORTUNITIES
Eva Yi-Wei Chang, University of Science & Technology, Taiwan, China

IAC-18.D6.2-D2.9.3
RISK MANAGEMENT FOR COMMERCIAL HUMAN SPACEFLIGHT
Andrea Harrington, Air University, United States

IAC-18.D6.2-D2.9.4
A NEW COMMERCIAL SPACEFLIGHT TRAINING PROGRAM FOR SUBORBITAL AND ORBITAL SPACEFLIGHT
Charles Lauer, Blue Abyss, United States

IAC-18.D6.2-D2.9.5
THE ROLE OF PARLIAMENTS IN SPACE AND SECURITY
Angeliki Papadimitriou, European Space Agency (ESA), France

IAC-18.D6.2-D2.9.7
INTERNAL NOISE SOURCE LOCATION OF MANNED SPACECRAFT CAPSULE BASED ON SPHERICAL MICROPHONE ARRAY
Dandan Ding, , China

IAC-18.D6.2-D2.9.8
A CRITICAL ASSESSMENT OF THE SMALL LAUNCH VEHICLE MARKET
Daniel Adams, United Launch Alliance, United States

IAC-18.D6.2-D2.9.9
SMALL LAUNCH VEHICLES - A 2018 STATE OF THE INDUSTRY SURVEY
Carlos Niederstrasser, Northrop Grumman Corporation, United States

IAC-18.D6.2-D2.9.10
INVESTIGATION ON REENTRY AND RECOVERY SCENARIOS OF A SUBORBITAL ROCKET FOR REUSABILITY PURPOSES
Hamed Gamal, SpaceForest Ltd., Poland

IAC-18.D6.2-D2.9.11
ILR-33 „AMBER" ROCKET - A PLATFORM FOR MICROLAUNCHER SYSTEM TECHNOLOGY DEVELOPMENT
Dawid Cieslinski, Institute of Aviation, Poland

IAC-18.D6.2-D2.9.12
OVERVIEW OF THE SABER MISSION AND LAUNCH VEHICLE DESIGN
Jared Fuchs, University of Alabama in Huntsville, United States

D6.3. Enabling safe commercial spaceflight: vehicles and spaceports

October 4 2018, 09:45 — ÖVB 4

Co-Chair(s): *Christophe Chavagnac , Airbus Defence and Space SAS, France; John Sloan , Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States;*
Rapporteur(s): *Francesco Santoro , Altec S.p.A., Italy;*

IAC-18.D6.3.1
ROLE OF THERMOACCOUSTIC COUPLING WITH EXTERNAL HEAT SOURCE ON POTENTIAL PROPULSIVE FIRES
Vinayak Malhotra, SRM University Chennai, India

IAC-18.D6.3.2
IMPLEMENTING AND OPERATING SPACEPORTS: LEGAL AND REGULATORY ISSUES
Magda Cocco, Vieira de Almeida & Associados, Portugal

IAC-18.D6.3.3
THE NEARSPACE INTERFACE BETWEEN AIR AND SPACE TRAFFIC MANAGEMENT
Sven Kaltenhaeuser, DLR, German Aerospace Center, Germany

IAC-18.D6.3.4
SPACEPORTS SELECTION AND OUTFITTING: A CHALLENGE FOR PROVIDING WIDE RANGE OPPORTUNITIES AND OPERATING SERVICES TO COMMERCIAL SPACE ACTIVITIES
Francesco Santoro, Altec S.p.A., Italy

IAC-18.D6.3.5
A PRELIMINARY STUDY ON THE PRICE MODEL FROM AVIATION TO SUBORBITAL TO ORBITAL SPACE TOURISM
Eva Yi-Wei Chang, University of Science & Technology, Taiwan, China

IAC-18.D6.3.6
CABLELESS COMMUNICATION IN LAUNCH VEHICLE INTERSTAGE SEPARATION BASED ON LED VISIBLE LIGHT COMMUNICATION
Yang Liu, Beijing Institute of Aerospace Systems Engineering, China Aerospace Science and Technology Corporation (CASC), China

IAC-18.D6.3.8
FROM AVIATION TOURISM TO SUBORBITAL SPACE TOURISM: THE ISSUE ON SPACEPORT REQUIREMENTS
Eva Yi-Wei Chang, University of Science & Technology, Taiwan, China

IAC-18.D6.3.9
SPACEPORT OPERATIONS IN EUROPE
Dirk-Roger Schmitt, DLR (German Aerospace Center), Germany

E1. IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM

Coordinator(s): *Lisa Antoniadis , EASL, Switzerland; Naomi Mathers , Space Industry Association of Australia, Australia;*

E1.1. Ignition - Primary Space Education

October 5 2018, 09:45 — CCB Scharoun

Co-Chair(s): *Carol Carnett , International Space University (ISU), United States; Kaori Sasaki , Japan Aerospace Exploration Agency (JAXA), Japan;*
Rapporteur(s): *Christopher Vasko , European Space Agency (ESA), France; Gulnara T. Omarova , Astrophysical Institute, Kazakhstan;*

IAC-18.E1.1.1
COMPUTATIONAL THINKING: THE THINKING PRECEDES THE DOING
Mark Gleeson, Victorian Space Science Education Centre, Australia

IAC-18.E1.1.2
"MISSION X – TRAIN LIKE AN ASTRONAUT" IN ITALY: AN EDUCATIONAL BEST PRACTICE
Doreen Hagemeister, Italian Space Agency (ASI), Italy

IAC-18.E1.1.3
PROMOTING STEM IN PRIMARY SCHOOLS THE CASE OF SUPERNOVAS SPACE EDUCATION PROGRAM IN CENTRAL AMERICA.
Luis Monge, Central American Association for Aeronautics and Space (ACAE), Costa Rica

IAC-18.E1.1.4
IT STARTS EARLY: A LOVE OF LEARNING IS IN THE STARS
Kyla Borders, University of Washington, United States

IAC-18.E1.1.6
THE IMPACT OF NEWLY ESTABLISHED UNITED ARAB EMIRATES SPACE AGENCY ON EDUCATION AND CAPACITY BUILDING
Sheikha Al Maskari, UAE Space Agency, United Arab Emirates

IAC-18.E1.1.7
ILLUMINATING SPACE SCIENCE ENGAGEMENT IN LOW SCIENCE CAPITAL COMMUNITIES: BLACKPOOL, LANCASHIRE, UK
Robert Walsh, , United Kingdom

IAC-18.E1.1.8
THE EFFECTS OF SPACE EDUCATIONAL TRAINING PROGRAM FOR PRIMARY SCHOOL TEACHERS -ANALYSIS OF SATISFACTION WITH THE PROGRAM AND THE FACTORS OF TEACHERS-
Daisuke Taniguchi, JAXA, Japan

IAC-18.E1.1.9
MAKING CUBESATS AND SPACE SCIENCE MORE ACCESSIBLE THROUGH EDUCATIONAL OUTREACH
Aimee Roy, University of Alberta, Canada

IAC-18.E1.1.10
THE EUROPEAN ASTROPI CHALLENGE – UTILIZING THE INTERNATIONAL SPACE STATION AS AN EDUCATIONAL PLATFORM FOR STEM SUBJECT LEARNING
Alana Bartolini, ESA, The Netherlands

IAC-18.E1.1.11
10 YEAR STRATEGIC PLAN FOR GHANA SPACE OUTREACH ACTIVITIES
Ernest Teye Matey, , Ghana

IAC-18.E1.1.12
AMATEUR RADIO ON ISS – NEXT GENERATION HAM TV SYSTEM
Oliver Amend DG6BCE, , Germany

IAC-18.E1.1.14
the gamification of methods and materials of space science education for a better and active learning experience
Buket Helin HELVACILAR, , Turkey

E1.2. Lift-Off - Secondary Space Education

October 5 2018, 13:30 — CCB Scharoun

Co-Chair(s): *Michaela Gitsch , Austrian Research Promotion Agency, Austria; Seyed Ali Nasseri , Space Generation Advisory Council (SGAC), Canada;*
Rapporteur(s): *Carlos Duarte , Agencia Espacial Mexicana (AEM), Mexico; Christopher Vasko , European Space Agency (ESA), France;*

IAC-18.E1.2.1
FROM EARTH TO MOON AND BEYOND – IMMERSIVE STEM EDUCATION BASED ON REMOTE SENSING DATA
Claudia Lindner, Ruhr-University Bochum, Germany

IAC-18.E1.2.2
AN INNOVATIVE APPROACH TO LEVERAGE ON 3D-PRINTING AND LOCAL MATERIALS FOR SPACE EDUCATION OUTREACH TO SECONDARY SCHOOLS IN AFRICA: A LOOK AT IRAWOSCOPE -AFRICA'S FIRST 3D-PRINTED AFFORDABLE AMATEUR TELESCOPE.
Henry Ibitolu, Federal University of Technology Akure, Ondo state, Nigeria, Nigeria

IAC-18.E1.2.3
ACCESS TO SPACE FOR STEM EDUCATION VIA ICE CUBES
Hilde Stenuit, Space Applications Services N.V./S.A., Belgium

IAC-18.E1.2.5
SPACE STUDIO WEST LONDON – A PROJECT BASED LEARNING MODEL FOR SPACE EDUCATION
Satinder Shergill, Space Studio West London, United Kingdom

IAC-18.E1.2.6
IMAGINE, INSPIRE, INNOVATE: TEACHER-RESEARCHER SPACE SCIENCE PARTNERSHIPS CATALYZE STUDENT OPPORTUNITIES IN STEM
Kareen Borders, University of Washington, United States

IAC-18.E1.2.7
CASE-BASED SPACE OUTREACH: THE CASE OF A MISSION TO MARS
Seyed Ali Nasseri, Space Generation Advisory Council (SGAC), Canada

IAC-18.E1.2.8
THE NATIONAL CANSAT COMPETITION : REFLECTION ON THE COMPULSORY EDUCATION STRATEGY OF SCIENCE AND TECHNOLOGY IN THAILAND
Wares Chancharoen, King Mongkut's University of Technology Thonburi, Thailand

IAC-18.E1.2.9
EDUCATIONAL PROJECT "ENGINEER CLASS IN A MOSCOW HIGH-SCHOOL" AIMED AT INCREASING THE EFFICIENCY OF STEM-EDUCATION
Vera Mayorova, Bauman Moscow State Technical University, Russian Federation

IAC-18.E1.2.10
STUDENTS TEACHING STUDENTS: DESIGNING AND LAUNCHING A SUBORBITAL EXPERIMENT AT A U.S. MONTESSORI SCHOOL
Brian Gulliver, Kimley-Horn, United States

IAC-18.E1.2.11
FROM THE CLASSROOM TO THE FIELD AND BEYOND: AUTHENTIC RESEARCH EXPERIENCES FOR EDUCATORS
Mark Gargano, St Joseph's School, Australia

IAC-18.E1.2.12
THE SPACE GEODESY CENTER OF MATERA OF THE ITALIAN SPACE AGENCY AS A SPACE EDUCATION CENTER
Doreen Hagemeister, Italian Space Agency (ASI), Italy

E1.3. On Track - Undergraduate Space Education

October 2 2018, 09:45 — CCB Scharoun

Co-Chair(s): *Camille Alleyne , NASA, United States; Hubert Diez, CNES, France;*
Rapporteur(s): *Michal Kunes , Czech Space Office, Czech Republic;*

IAC-18.E1.3.1
CUBESAT EDUCATION – BIGGER THAN STEM
Jim Hefkey, , New Zealand

IAC-18.E1.3.2
ACTIVE LEARNING PROGRAM USING PARABOLIC FLIGHT RESULTS OF SPACE EDUCATION PROGRAM OF TOKYO UNIVERSITY OF SCIENCE AND BEYOND
Shinichi Kimura, Tokyo University of Science, Japan

IAC-18.E1.3.4
LOWRCANSAT: LOW COST WATER ROCKET CANSAT
Cristian Chavez, Pontifical Catholic University of Chile, Chile

IAC-18.E1.3.5
STRATEGY FOR INTRODUCTION OF UNDERGRADUATE STUDENTS TO THE AEROSPACE FIELD IN COLOMBIA
Oscar Ivan Ojeda Ramirez, Universidad Nacional de Colombia, Colombia

IAC-18.E1.3.6
MULTITROP: THE CHALLENGE OF USING A REFURBISHED HARDWARE FOR AN EDUCATIONAL AND SCIENTIFIC EXPERIMENT ON THE ISS
Giovanna Aronne, Università degli Studi di Napoli "Federico II", Italy

IAC-18.E1.3.7
STUDENT CEF AT SAPIENZA - UNIVERSITY OF ROME: PRELIMINARY DESIGN OF SPEC CUBESAT WITH OPTICAL PAYLOAD
Andrea Gianfermo, Sapienza University of Rome, Italy

IAC-18.E1.3.8
GETTING STUDENTS CLOSER TO UNIVERSITY RESEARCH – LIFE SUPPORT SYSTEM TRAINING AT THE UNIVERSITY OF STUTTGART
Gisela Detrell, Institute of Space Systems, University of Stuttgart, Germany

IAC-18.E1.3.9
UNIVERSITY OF WARSAW ROVER TEAM - THE CHALLENGES AND BENEFITS OF LONG-TERM, HANDS-ON TECHNICAL PROJECTS FOR NON-ENGINEERING STUDENTS
Maciej Bartylak, University of Warsaw, Poland

IAC-18.E1.3.10
PROJECT ATLANTIS: APPLIED TECHNOLOGY LEARNING ACTIVITIES FOR NON-TRADITIONAL INSTRUCTION ON SPACE
Jaclyn Wiley, Embry Riddle Aeronautical University, United States

IAC-18.E1.3.11
INTEGRATION OF SMALL SATELLITES DESIGN PROCESS INTO THE SPECIALIST'S DEGREE EDUCATIONAL PROGRAM
Georgy Shcheglov, Bauman Moscow State Technical University, Russian Federation

IAC-18.E1.3.12
INTERNATIONAL SPACE EDUCATIONAL ACTIVITIES AT NAROM
Jøran Grande, NAROM - Norwegian Centre for Space-Related Education, Norway

E1.4. In Orbit - Postgraduate Space Education

October 2 2018, 14:45 — CCB Scharoun

Co-Chair(s): *Camille Alleyne , NASA, United States; David B. Spencer, The Pennsylvania State University, United States;*
Rapporteur(s): *Remco Timmermans , International Space University (ISU), The Netherlands; Thierry Dana-Picard , Jerusalem College of Technology (JCT), Israel;*

IAC-18.E1.4.1
ÜBERFLIEGER - UPDATE AND LESSONS LEARNED
Johannes Weppler, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.E1.4.2
SOCIAL SCIENCE WORKSHOP INSIGHTS ON MOON VILLAGE AGREEMENT
Tuva Atasever, International Space University, France

IAC-18.E1.4.3
STRATOSPHERIC BALLOONS LAUNCHES FOR SYSTEM ENGINEERING EDUCATIONAL COURSE
Nikolay Mullin, Skolkovo Institute of Science and Technology, Russian Federation

IAC-18.E1.4.4
HANDS-ON EDUCATION AND STUDENT RESEARCH AT TU BERLIN: SATELLITES, ROVERS, ROCKETS AND SPACE SYSTEM EXPERIMENTS DEVELOPED BY STUDENTS IN AN INTERNATIONAL ENVIRONMENT
Martin Buscher, Technische Universität Berlin, Germany

IAC-18.E1.4.5
DESIGN AND 3D-PRINTING OF A MARTIAN SPACESUIT
Thibault PARIS, , France

IAC-18.E1.4.6
PROBLEM-BASED LEARNING AS AN EDUCATIONAL METHOD FOR THE 21ST GENERATION SPACE SCIENTISTS
Marco Cabero, Beihang University, China

IAC-18.E1.4.7
A POTENTIAL COLLABORATION BETWEEN THE FUTURE AUSTRALIAN SPACE AGENCY AND AUSTRALIAN MEDICAL SCHOOLS
James Kurrle, , Australia

IAC-18.E1.4.8
THE NASA ACADEMIES: A MODEL FOR STUDENT ENGAGEMENT
Nathan Boll, National Academies of Sciences, Engineering, and Medicine, United States

IAC-18.E1.4.9
A MULTI-NATIONAL MULTI-INSTITUTIONAL EDUCATION FRAMEWORK: APSCO SSS-2B CUBESAT PROJECT
Burak Yaglioglu, TUBITAK Uzay, Space Technologies Research Institute, Turkey

IAC-18.E1.4.10
INTERDISCIPLINARY WORKSHOP ON HUMAN HABITATION CONCEPTS FOR INTERSTELLAR SPACE TRAVEL
Marlies Arnhof, Advanced Concepts Team, ESA, The Netherlands

IAC-18.E1.4.11
MASTER OF SCIENCE DEGREE IN ASTRONAUTICAL ENGINEERING THROUGH DISTANCE LEARNING
Mike Gruntman, Viterbi School of Engineering, USC, United States

IAC-18.E1.4.13
BREAKING BARRIERS: EXPERIENCES OF GHANAIAN FEMALE STEM PROFESSORS' DOCTORAL JOURNEY
Owusu Ansah Boakye, Texas State University, United States

E1.5. Enabling the Future - Developing the Space Workforce

October 3 2018, 14:45 — CCB Scharoun

Co-Chair(s): *Amalio Monzon , Airbus Defence and Space, Spain; Olga Zhdanovich , Ajilon for European Space Agency, The Netherlands;*
Rapporteur(s): *Hubert Diez , CNES, France; Michal Kunes , Czech Space Office, Czech Republic;*

IAC-18.E1.5.1
IAC WORKFORCE DEVELOPMENT TECHNICAL SESSION - 10 YEARS ADDRESSING THE CHALLENGES TO BUILD THE FUTURE AEROSPACE WORKFORCE
Amalio Monzon, Airbus Defence and Space, Spain

IAC-18.E1.5.2
THE FUTURE WORKFORCE ON LEARNING FROM AND WITH PEERS WHILE NAVIGATING THROUGH THE ERA OF SPACE 4.0
Birgit Hartman, European Space Agency (ESA), France

IAC-18.E1.5.3
GOVERNMENTAL SUPPORTED SPACE INTERNSHIP PROGRAMMES IN NEW ESA MEMEBER STATES - POLISH PRESPECTIVE
Krzysztof Kanawka, Blue Dot Solutions, Poland

IAC-18.E1.5.4
ATTRACT, INSPIRE, AND SUPPORT THE BEST TALENT - A WORKFORCE DEVELOPMENT FRAMEWORK, TOOLSET, AND EVENT PLATFORM FOR NEWSPACE STARTUPS
Bernd Michael Weiss, Catalyze Space; International Space University, Germany

IAC-18.E1.5.5
CNES INITIATIVES TO ENCOURAGE AND PREPARE THE SPACE FORCES FOR TOMORROW
Hubert Diez, CNES, France

IAC-18.E1.5.6
UAE SPACE AGENCY YOUTH COUNCIL
Maitha Al Romaithi, UAE Space Agency, United Arab Emirates

IAC-18.E1.5.7
SPACE: THE DRIVER OF THE DESIRED FUTURE IN AFRICA - RECOMMENDATIONS FROM THE 1ST AFRICAN SPACE GENERATION WORKSHOP
Oniosun Temidayo Isaiah, Federal University of Technology Akure, Ondo state, Nigeria, Nigeria

IAC-18.E1.5.8
CREATING A SUSTAINABLE SPACE ECOSYSTEM IN LUXEMBOURG
Gary Martin, Luxembourg Ministry of the Economy, Luxemburg

IAC-18.E1.5.9
SPACE WORKING ENVIRONMENTS IN ITALY - A COMMITMENT TO OFFER IN BOTH THE PUBLIC AND PRIVATE SECTOR, INSPIRING EXAMPLES OF INCLUSIVENESS, EQUALITY, WELLNESS AND ORGANIZATIONAL EFFICIENCY
Giacomo Primo Sciortino, Italian Space Agency (ASI), Italy

IAC-18.E1.5.10
21ST CENTURY TRAINING FOR THE NEW SPACE WORKFORCE
Adam Baker, Catena Space, United Kingdom

IAC-18.E1.5.11
TRAINING TOOLS AND MATERIAL TO USE THE ECSS SYSTEM
Enrique GonzalezConde, ESA (retired), Spain

IAC-18.E1.5.12
EMPOWERING WOMEN TO CREATE SPACE WORKFORCE IN NEPAL
Manisha Dwa, Nepal Astronomical Society (NASO), Nepal

IAC-18.E1.5.13
MISSION 2027: SUSTAINABLE SPACE PROGRAM & A TECHNICAL ROAD MAP DESIGNED FOR BANGLADESH TO ACHIEVE SELF-RELIANCE IN SPACE TECHNOLOGY
Raihana Shams Islam Antara, BRAC University, Bangladesh

IAC-18.E1.5.14 (non-confirmed)
UNAM´S SPACE PROGRAM, CHALLENGES AND OPPORTUNITIES
Saul Santilllan- Gutierrez, Facultad de Ingeniería-UNAM, Mexico

IAC-18.E1.5.15
BALANCING THE FUTURE SPACE WORKFORCE: A EUROPEAN PERSPECTIVE
Paola Belingheri, Women in Aerospace Europe (WIA-E), The Netherlands

E1.6. Calling Planet Earth - Space Outreach to the General Public

October 1 2018, 15:00 — CCB Scharoun

Co-Chair(s): *Jessica Culler , The Planetary Society, United States; Nelly Ben Hayoun , Royal Holloway, University of London, United Kingdom;*
Rapporteur(s): *Frank Friedlaender , Lockheed Martin Space Systems Company, United States; Thierry Dana-Picard , Jerusalem College of Technology (JCT), Israel;*

IAC-18.E1.6.1
KEYNOTE: USING DESIGN COMPETITION PROJECTS FOR A SPACECRAFT DESIGN CAPSTONE
David B. Spencer, The Pennsylvania State University, United States

IAC-18.E1.6.2
ESTABLISHING THE PLANETARY SOCIETY IN LONDON
Harriet Brettle, California Institute of Technology, United States

IAC-18.E1.6.3
BESPACE: THE COMMUNITY FOR SPACE ENTHUSIASTS IN BELGIUM
Deepak Mehta, None, Belgium

IAC-18.E1.6.4
THE EUROPEAN SPACE AGENCY'S COMMUNICATION EVOLUTION TOWARD SPACE 4.0
Philippe Willekens, European Space Agency (ESA), France

IAC-18.E1.6.5
SFU SATELLITE DESIGN TEAM EDUCATIONAL OUTREACH
Donya Naz Divsalar, Simon Fraser University, Canada

IAC-18.E1.6.6
ONE WEEK SPACE – LESSONS LEARNED FROM 25 ANNUAL HUNGARIAN SPACE CAMPS
Dorottya Milankovich, Innostudio Inc., Hungary

IAC-18.E1.6.7
UNITING WITH THE PEOPLE: SOYUZ AND ITS TOURING OF THE UNITED KINGDOM
Douglas Millard, The Science Museum, United Kingdom

IAC-18.E1.6.9
THE YEAR OF PLUTO: DELIVERING PLUTO TO THE WORLD
Kerri Beisser, The Johns Hopkins University Applied Physics Laboratory, United States

IAC-18.E1.6.10
HATCH: OPENING THE DOOR TO SPACE RESEARCH
Tanya Boardman, Catena Space, United Kingdom

IAC-18.E1.6.11
INVESTIGATION ON THE IMPACT OF PUBLIC RELATION ACTIVITIES ON SPACEFLIGHT POPULARITY USING THE EXAMPLE OF GERMANY AND ITS EFFECTS ON EUROPEAN NEWSPACE INDUSTRY
Jerry Sigmund, GAIA Aerospace, Germany

E1.7. New Worlds - Non-Traditional Space Education and Outreach

October 4 2018, 09:45 — CCB Scharoun

Co-Chair(s): *Olga Zhdanovich , Ajilon for European Space Agency, The Netherlands; Vera Mayorova , Bauman Moscow State Technical University, Russian Federation;*
Rapporteur(s): *Carol Christian , STScI, United States;*

IAC-18.E1.7.1
NASA AND ASME: PARTNERING TO DEVELOP FUTURE ENGINEERS THROUGH CROWDSOURCING CHALLENGES
Jason Crusan, National Aeronautics and Space Administration (NASA), United States

IAC-18.E1.7.2
THE SPACE TRUCK - A MOBILE SPACE EXHIBITION WITH HANDS-ON PROJECTS
Jari Makinen, , France

IAC-18.E1.7.3
IMPLEMENTATION FEATURES OF SCIENTIFIC AND EDUCATIONAL PROGRAMS IN THE FIELD OF PRIMARY ENGINEERING EDUCATION ON THE BASIS OF CHILDREN'S CAMPS
Victor Leonov, Bauman Moscow State Technical University, Russian Federation

IAC-18.E1.7.4
THE MULTI-ROLES AND IMPACT OF AIR AND SPACE MUSEUM OF BEIHANG UNIVERSITY ON SPACE EDUCATION AND SPACE CULTURE HERITAGE
YI Xiao Su, Beihang University (BUAA), China

IAC-18.E1.7.5
THE EXPERIMENTS FOR YOUTH SPACE EDUCATION ABOARD ISS RS
Sergey Samburov, Rocket-Space Corporation «Energia», Russian Federation

IAC-18.E1.7.7
INSPIRE THE NEXT GENERATION THROUGH THE AMADEE-18 MARS ANALOG SIMULATION
Sophie Gruber, Austrian Space Forum, Austria

IAC-18.E1.7.8 (non-confirmed)
PREACHING SPACE SCIENCE TO RURAL DWELLERS AND UNEDUCATED
Anthony Nwachukwu, , Nigeria

IAC-18.E1.7.9
EDUCATIONAL ANALOG MISSIONS IN LUNARES HABITAT IN POLAND
Agata Kolodziejczyk, Astronomia Nova Society, for Science Foundation, Poland

IAC-18.E1.7.10
SPACE DESIGN LEARNING. AN INNOVATIVE APPROACH OF SPACE EDUCATION THROUGH DESIGN
Annalisa Dominoni, Politecnico di Milano, Italy

IAC-18.E1.7.12
BUILDING RESILIENCE FOR LONG DURATION SPACE FLIGHT: A MULTIPLE PROJECT STUDY ACROSS MULTIPLE DISCIPLINE AREAS WITH PRIMARY HOSTS AS ARCHITECTURE AND INDUSTRIAL DESIGN TERTIARY PROGRAMS IN USA AND AUSTRALIA.
Sasha Alexander, Western Sydney University, Australia

IAC-18.E1.7.13
SMALLSATS FOR AMATEURS: A GUIDE FOR K-12 EDUCATORS, UNIVERSITY STUDENTS, PROFESSORS AND NEW SPACE ACTORS
Chris Beauregard, Space Policy Institute, George Washington University, United States

IAC-18.E1.7.14
THE SOUTHERN HEMISPHERE SPACE STUDIES PROGRAM: THE NEXT 5 YEARS
Adrian James, International Space University (ISU)/University of South Australia, Australia

E1.8. Hands-on Space Education and Outreach

October 3 2018, 09:45 — CCB Scharoun

Co-Chair(s): *Kevin Stube , The Planetary Society, United States; Lyn Wigbels , University Corporation for Atmospheric Research, United States;*
Rapporteur(s): *Carol Carnett , International Space University (ISU), United States; Remco Timmermans , International Space University (ISU), The Netherlands;*

IAC-18.E1.8.1
Promoting Hands-On Cubesat Activities for Space Education and Outreach in Brazil
Walter Abrahão Dos Santos, Instituto Nacional de Pesquisas Espaciais (INPE), Brazil

IAC-18.E1.8.2
Satellite Full-Scale Replica as a Hands-on for Assembly and Integration Process Training
Sajjad Ghazanfarinia, Satellite Research Institute, Iranian Space Research Center, Iran

IAC-18.E1.8.3
MARS AND SPACE EXPLORATION PROGRAM: EMPOWERING UNDERGRADUATE STEM EDUCATION THROUGH HANDS-ON COLLABORATIVE PROJECTS
Olga Bannova, University of Houston, United States

IAC-18.E1.8.4
SPACE TRAVEL INVOLVING EVERYONE WITH LIVE ACTION ROLE PLAY (LARP) FOR STEAM EDUCATION
Patty Rangel- Hernandez, Superluminal Systems Integrative Collaborative Learning, United States

IAC-18.E1.8.5
EARTH OBSERVATION IN THE CLASSROOM
Jøran Grande, NAROM - Norwegian Centre for Space-Related Education, Norway

E1.9. Space Culture – Public Engagement in Space through Culture

October 4 2018, 14:45 — CCB Scharoun

Co-Chair(s): *Lisa Antoniadis , EASL, Switzerland; Nelly Ben Hayoun , Royal Holloway, University of London, United Kingdom;*
Rapporteur(s): *Carol Oliver , University of New South Wales, Australia; Nahum Mantra , Laboratorio Arte Alameda, Mexico;*

IAC-18.E1.9.1
SPACE TECH IN HOLLYWOOD: AN ALIEN EXPERIENCE
Kate Arkless Gray, PTScientists, United Kingdom

IAC-18.E1.9.2 (non-confirmed)
GLOBAL SCIENCE OPERAS: MOON VILLAGE (2017), OCEANS & CLIMATE (2018)
Bernard Foing, ESA/ESTEC, ILEWG & VU Amsterdam, The Netherlands

IAC-18.E1.9.3
THE MARTIAN COALITION FOR THEORETICAL LIFE ORIGINS
Jack Wilkinson, , United States

IAC-18.E1.9.4
THE JOY OF SETS PRESENTS CAPRICORN TWO: A MARS MISSION SIMULATION
Joseph Popper, , Switzerland

IAC-18.E1.9.5
FUTURE PROSPECTS AND PHILOSOPHY OF SPORTS IN SPACE
MAKOTO ARAI, Dentsu Inc., Japan

IAC-18.E1.9.6
ALIEN NATION: STUDENTS OF VOICES OF NOW BRING SPACECRAFT HUMAN TO THE STAGE
Monica Ebert, SGT Inc. / NASA Ames Research Center, United States

IAC-18.E1.9.8
THE CELESTIAL THEATRE: OF BLACK-LIGHT, FLUORESCENT COSTUMES & A SPACE ODYSSEY
Sathesh Raj, World Space Week Association, Malaysia

IAC-18.E1.9.9
UNISTELLAR EVSCOPES: SMART, PORTABLE AND EASY-TO-USE TELESCOPES FOR EXPLORATION, INTERACTIVE LEARNING, AND CITIZEN ASTRONOMY
Franck Marchis, SETI Institute, United States

IAC-18.E1.9.10
PREDICTING A CONSENSUS MODEL FOR REACTING TO EXTRATERRESTRIAL LIFE USING LEGO SERIOUS PLAY
Ruth McAvinia, ATG Europe B.V., Ireland

IAC-18.E1.9.11
A REGIONAL FESTIVAL FOR SPACE AND FAMILIES TO ENGAGE PUBLIC DEMAND ON SPACE TECHNOLOGY
Sajjad Ghazanfarinia, Satellite Research Institute, Iranian Space Research Center, Iran

IAC-18.E1.9.13
A MESSAGE FROM EARTH: REIMAGINING THE GOLDEN RECORD 40 YEARS ON TO EXPLORE HOW CULTURAL CURATORS CAN USE SPACE AS A STORYTELLING TOOL
Rob Alderson, , The Netherlands

IAC-18.E1.9.14
CAPE (CLIMATE ANTICIPATION PERSONAL ENVIRONMENT): CONSTRUCTING THE CAAS-WARDROBE
Sue Fairburn, Wilson School of Design - Kwantlen Polytechnic University, Canada

IAC-18.E1.9.15
THE CONSCIOUS CULTURING OF SPACE CULTURE
Aoife van Linden Tol, Feral Events, United Kingdom

E2. 46th STUDENT CONFERENCE

Coordinator(s): *Franco Bernelli-Zazzera , Politecnico di Milano, Italy; Marco Schmidt , Bochum University of Applied Sciences, Germany;*

E2.1. Student Conference – Part 1

October 2 2018, 09:45 — ÖVB 4

Co-Chair(s): *Benedicte Escudier , Institut Supérieur de l'Aéronautique et de l'Espace (ISAE), France; Franco Bernelli-Zazzera , Politecnico di Milano, Italy;*
Rapporteur(s): *Emmanuel Zenou , Institut Supérieur de l'Aéronautique et de l'Espace (ISAE), France; Jeong-Won Lee , Korea Aerospace Research Institute (KARI), Korea, Republic of;*

IAC-18.E2.1.1
A NOVEL HIGH-PERFORMANCE NANOSATELLITE ATTITUDE AND RATE SENSOR
Gabriël Roux, Stellenbosch University, South Africa

IAC-18.E2.1.2
MAPPING TRAJECTORIES OF AN ASTEROID THAT IS DEFLECTED BY A COLLISION
Rodolfo Batista Negri, Instituto Nacional de Pesquisas Espaciais (INPE), Brazil

IAC-18.E2.1.3 (non-confirmed)
AUTONOMOUS NAVIGATION OF MICRO AIR VEHICLES IN GPS-DENIED ENVIRONMENTS FOR EXTREME TERRAIN PLANETARY EXPLORATION
Pradyumna Nanda Vyshnav, Aalto University, Finland

IAC-18.E2.1.4
GROUND BASED ANGULAR RATE RECONSTRUCTION WITH INTERMITTENT MAGNETOMETER DATA FROM PHOENIX CUBESAT
Ming-Yang Hong, National Cheng Kung University, Taiwan, China

IAC-18.E2.1.5
GROUND STATIONS NETWORK USING SOFTWARE DEFINED RADIO FOR ENVIRONMENTAL STORE & FORWARD CUBESATS MISSIONS IN COSTA RICA.
Esteban Martinez, Costa Rica Institute of Technology (ITCR), Costa Rica

IAC-18.E2.1.6
HYBRID ROCKET PERFORMANCE OPTIMIZATION THROUGH THERMAL PHASE CHANGE NUMERICAL SIMULATIONS OF NITROUS OXIDE
Emerson Vargas Niño, University of Toronto Aerospace Team (UTAT), Canada

IAC-18.E2.1.7
IMPACT PROBABILITY COMPUTATION FOR NEO RESONANT RETURNS THROUGH A POLYNOMIAL REPRESENTATION OF THE LINE OF VARIATIONS
Marcello Sciarra, Politecnico di Milano, Italy

IAC-18.E2.1.9
SUB-PIXEL IMAGE REGISTRATION ON AN EMBEDDED SATELLITE PLATFORM
Jürgen Lüdemann, Stellenbosch University, South Africa

E2.2. Student Conference – Part 2

October 3 2018, 09:45 — CCB London

Co-Chair(s): *Jeong-Won Lee , Korea Aerospace Research Institute (KARI), Korea, Republic of; Marco Schmidt , Bochum University of Applied Sciences, Germany;*
Rapporteur(s): *Benedicte Escudier , Institut Supérieur de l'Aéronautique et de l'Espace (ISAE), France; Carlos Duarte , Agencia Espacial Mexicana (AEM), Mexico;*

IAC-18.E2.2.3
HYBRID OPTIMIZATION OF LOW-THRUST MANY-REVOLUTIONS TRAJECTORIES WITH COASTING ARCS AND LONGITUDE TARGETING FOR PROPELLANT MINIMIZATION
David Jimenez-Lluva, Delft University of Technology (TU Delft), The Netherlands

IAC-18.E2.2.4
NEW METHOD FOR ORBIT PREDICTION USING LSTM NETWORK BASED ON THE PAST TLES
Wonhoe Ku, Korea University of Science & Technology (UST), Korea, Republic of

IAC-18.E2.2.5
PROPELLANTLESS CLOSE RANGE RENDEZVOUS AND DOCKING USING A SINGLE ELECTROMAGNETIC DEVISE FOR SMALL SPACECRAFT
Yuki Yamada, Nagoya University, Japan

IAC-18.E2.2.7
USE OF IN SITU SALT ICE TO BUILD A SUSTAINABLE RADIATION SHIELDING HABITAT ON MARS
Layla van Ellen, Delft University of Technology (TU Delft), The Netherlands

IAC-18.E2.2.8
THERMAL CONDUCTIVITY AND SPECIFIC HEAT MEASUREMENTS OF AN RTV-655/POLYIMIDE AEROGEL COMPOUND AT 77K AND 298K
Ken Mitchell, American Institute of Aeronautics and Astronautics (AIAA), United States

IAC-18.E2.2.9
Lunar Habitat
CORENTIN BUTI, ISAE - INSTITUT SUPÉRIEUR DE L'AÉRONAUTIQUE ET DE L'ESPACE, FRANCE

IAC-18.E2.2.10
MODELLING AND CHARACTERISATION OF PLASMADYNAMIC DRAG ON GRIDDED ION ENGINE PROPELLED SPACECRAFT IN VERY LOW EARTH ORBIT
Shaun Andrews, University of Bristol, United Kingdom

IAC-18.E2.2.11
SPACEDRIVE – DEVELOPMENT OF A SUPERCONDUCTING LEVITATION THRUST BALANCE FOR PROPELLANTLESS PROPULSION
Oliver Neunzig, Dresden University of Technology (DUT) / Technische Universität Dresden, Germany

IAC-18.E2.2.12
PERTURBED LAMBERT'S PROBLEM SOLVER BASED ON DIFFERENTIAL ALGEBRA OPTIMIZATION
Paolo Panicucci, ISAE - Institut Supérieur de l'Aéronautique et de l'Espace, France

E2.3-GTS.4. Student Team Competition

October 1 2018, 15:00 — ÖVB 4

Co-Chair(s): *Andrea Jaime , OHB System AG - Munich, Germany; Emmanuel Zenou , Institut Supérieur de l'Aéronautique et de l'Espace (ISAE), France;*
Rapporteur(s): *Michelle Mendes , World Space Week Association, United States;*

IAC-18.E2.3-GTS.4.1
PAPELL: FINAL STUDENT EXPERIMENT DESIGN OF A NON-MECHANICAL PUMPING SYSTEM ON THE ISS
Franziska Hild, KSat e.V., Germany

IAC-18.E2.3-GTS.4.2
MARS 10: A LANDER CAPABLE OF DELIVERING A TEN METRIC TON PAYLOAD SAFELY TO THE SURFACE OF MARS BY 2026
Pauline Delande, ISAE - Institut Supérieur de l'Aéronautique et de l'Espace, France

IAC-18.E2.3-GTS.4.3
MATRIOCHKA, ADVENTURE AND ACHIEVEMENT OF A TWO-STAGE ROCKET MADE BY FRENCH STUDENTS FROM ESTACA
Pierre GABRIELLI, ESTACA, France

IAC-18.E2.3-GTS.4.4
SPACE TUG: THE FUTURE OF LEO TO GEO TRANSPORT
Emmanuelle Aubert, ISAE - Institut Supérieur de l'Aéronautique et de l'Espace, France

IAC-18.E2.3-GTS.4.5
DROP YOUR THESIS 2018: 4.7 SECONDS OF MICROGRAVITY CONDITIONS TO ENABLE FUTURE CUBESAT LANDINGS ON ASTEROIDS
Elioenai Sitepu, Cranfield University, United Kingdom

IAC-18.E2.3-GTS.4.6
PROJECT ZEPHYRUS: AN AUTONOMOUS AND ECONOMICAL HIGH ALTITUDE TESTING SYSTEM
Hunter Hall, NASA JPL, United States

IAC-18.E2.3-GTS.4.7
BREAKING THE CANADIAN ALTITUDE RECORD: DEVELOPMENT OF A LOW-COST HYBRID SOUNDING ROCKET
Andreas Marquis, University of Toronto Aerospace Team (UTAT), Canada

IAC-18.E2.3-GTS.4.9
PERMANENT CREWED MARS BASE BY 2030 - OUTCOMES OF AN INTERDISCIPLINARY, MULTINATIONAL STUDENT WORKSHOP
Markus Guerster, Massachusetts Institute of Technology (MIT), United States

IAC-18.E2.3-GTS.4.10
DESIGN AND BUILDING OF A CUBESAT FOR RADIO TELESCOPE CALIBRATION
Harrison Handley, Simon Fraser University, Canada

IAC-18.E2.3-GTS.4.11
ARTEMIS: A COMPLETE MISSION ARCHITECTURE TO BRIDGE THE GAP BETWEEN HUMANITY AND NEAR-EARTH ASTEROIDS
Aris Golemis, Cranfield University, Greece

IAC-18.E2.3-GTS.4.12
DEVELOPMENT OF AN EXPANDABLE AIRLOCK FOR A MARTIAN SETTLEMENT
Kyle Marquis, University of British Columbia, Canada

E2.4. Educational Pico and Nano Satellites

October 3 2018, 14:45 — CCB London

Co-Chair(s): *Xiaozhou Yu , Northwestern Polytechnical University, China;*
Rapporteur(s): *Franco Bernelli-Zazzera , Politecnico di Milano, Italy;*

IAC-18.E2.4.1
ENHANCED ATTITUDE STABILITY AND CONTROL FOR CUBESATS BY REAL-TIME ON-ORBIT DETERMINATION OF THEIR DYNAMIC MAGNETIC MOMENT
Abdelmadjid Lassakeur, Surrey Space Centre - University of Surrey, United Kingdom

IAC-18.E2.4.2
DEVELOPMENT OF A PSEUDO-CUBESAT AND DEPLOYER FOR TECHNOLOGY DEMONSTRATION IN MILLIGRAVITY ENVIRONMENT
Johannes Ferdinand Fürstenau, Technische Universität Berlin, Germany

IAC-18.E2.4.3
AN INTELLIGENT NANO-SATELLITE FOR ASTRONAUT ASSISTANCE
Rui Zhang, National University of Defense Technology, China

IAC-18.E2.4.4
RADIATION ANALYSIS OF CUBESAT NIMPH
Balaji Viswanathan, ISAE-Supaero University of Toulouse, France

IAC-18.E2.4.5
ANALYSIS OF TUMBLING MOTIONS BASED ON LIMITED TELEMETRY DATA AND RADIO SIGNALS
Ming-Xian Huang, National Cheng Kung University, Taiwan, China

IAC-18.E2.4.6
ALBISAT: 1-UNIT CUBESAT MISSION TO STUDY THE PERFORMANCE OF STRUCTURAL MATERIAL UTILIZING ADDITIVE LAYER MANUFACTURING
Muhammad Shadab Khan, IMT Mines Albi, France

IAC-18.E2.4.7
IN-ORBIT PERFORMANCE OF PISAT DETUMBLING AND ADVANCED B-DOT IMPLEMENTATION TO TACKLE CHALLENGES IN ACTIVE DETUMBLING MAGNETIC CONTROL SYSTEM OF NANOSATELLITES
Saurav K Shastri, PES Institute of Technology, India

IAC-18.E2.4.8
SOLAR SAIL-DRIVEN NANOSATELLITE CONSTELLATION FOR SUN ACTIVITY MONITORING
Vera Mayorova, Bauman Moscow State Technical University, Russian Federation

IAC-18.E2.4.9
EXPERIMENTING WITH NANOSATS AND PICOSATS FOR CAPACITY BUILDING IN BRAZIL
Walter Abrahão Dos Santos, Instituto Nacional de Pesquisas Espaciais (INPE), Brazil

IAC-18.E2.4.10
ATTITUDE CONTROL USING 3 AXIS MAGNETORQUERS AND PITCH AXIS REACTION WHEEL FOR SOLAR SAILING SATELLITE COEPSAT-2
Aditya Neralkar, College of Engineering Pune, India

IAC-18.E2.4.12 (non-confirmed)
DESIGN OF FAULT TOLERANT SYSTEM FOR THE ON-BOARD COMPUTER OF STUDSAT-2
Srinivas Pai, NMAMIT NITTE, India

E3. 31st IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS

Coordinator(s): *Bernhard Schmidt-Tedd , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Jacques Masson , European Space Agency (ESA), The Netherlands;*

E3.1. International Cooperation for the benefits of developing countries and emerging space nations

October 2 2018, 09:45 — CCB Franzius

Co-Chair(s): *Magda Cocco , Vieira de Almeida & Associados, Portugal; Timiebi Aganaba-Jeanty , Arizona State University, United States;*
Rapporteur(s): *Alexander Soucek , Austrian Space Forum, Austria; Peter Stubbe , DLR (German Aerospace Center), Germany;*

IAC-18.E3.1.1
COOPERATION IN SPACE: AN INTERNATIONAL COMPARISON FOR THE BENEFIT OF EMERGING SPACE AGENCIES
Ben Adams, International Space University (ISU)/University of South Australia, Australia

IAC-18.E3.1.2
ESA'S PARTNERSHIPS PROGRAMMES AT THE SERVICE OF SOCIETY
Maria-Gabriella Sarah, European Space Agency (ESA), France

IAC-18.E3.1.3
SPACE FOR ALL: THE GLOBAL SPACE PARTNERSHIP FOR THE SUSTAINABLE DEVELOPMENT GOALS
Hui Du, United Nations Office for Outer Space Affairs, Austria

IAC-18.E3.1.4
SPACE2030 - NEW ERA IN SPACE PARTNERSHIPS
Markus Woltran, United Nations Office for Outer Space Affairs, Austria

IAC-18.E3.1.5
THE INTERNATIONAL COOPERATION FOR THE BENEFIT OF THE DEVELOPING COUNTRIES AND THE EVOLUTION OF THE SPACE ACTIVITIES: CHALLENGES AND PERSPECTIVES
Camilo Guzman Gomez, UNIVERSIDAD SERGIO ARBOLEDA, Colombia

IAC-18.E3.1.6
APSCO AND THE POTENTIAL MEMBERSHIP OF INDIA, JAPAN AND SOUTH KOREA
Christoph Beischl, London Institute of Space Policy and Law, United Kingdom

IAC-18.E3.1.7
INTERNATIONAL SPACE FORUM AT MINISTERIAL LEVEL – THE AFRICAN CHAPTER
Nunzia Maria Paradiso, ASI - Italian Space Agency, Italy

IAC-18.E3.1.8
CAPACITY BUILDING: COMPARING TWO CATEGORIES OF INTERNATIONAL COLLABORATION
Reuben Jikeme Umunna, Kyushu Institue of Technology, Japan

IAC-18.E3.1.9
DEVELOPMENT OF NATIONAL SPACE GOVERNANCE AND POLICY TRENDS IN MEMBER STATES OF THE EUROPEAN SPACE AGENCY
Daniel Sagath, Vrije Universiteit Amsterdam, The Netherlands

IAC-18.E3.1.10
DIGITAL DIVIDE AND COMMUNICATION SATELLITE SERVICES: THE OPPORTUNITY OFFERED BY ODA
Simona di Ciaccio, Italian Space Agency (ASI), Italy

IAC-18.E3.1.12
AN AFRICAN SPACE AGENCY: A PROPOSED CENTERPIECE OF AFRICAN UNION SPACE POLICY
Mustapha Agbadi, Space Generation Advisory Council (SGAC) CSC, Nigeria

IAC-18.E3.1.13
INTERNATIONAL COOPERATION IN OUTER SPACE AND BEYOND: BRINGING COUNTRIES AND SECTORS TOGETHER FOR COMMON GOALS
Helena Correia Mendonça, Vieira de Almeida & Associados, Portugal

IAC-18.E3.1.14
A UP\^3\ TO SPACE APPROACH FOR ENHANCING NATIONAL SPACE CAPABILITIES AND PROMOTING INTERNATIONAL SPACE COLLABORATIONS: EXPERIENCES FROM "NCKU SPACE 2017"
Xavier L.W. Liao, Ghent University, Belgium

E3.2. Ways ahead in Space Exploration

October 2 2018, 14:45 — CCB Franzius

Co-Chair(s): *Marc Haese , DLR, German Aerospace Center, Germany; Nicolas Peter , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Devanshu Ganatra , , India;*

IAC-18.E3.2.1
OPTIMISING HUMAN SPACE EXPLORATION STRATEGIES AND POLICIES
Serge Plattard, University College London (UCL), United Kingdom

IAC-18.E3.2.2
INTERNATIONAL COLLABORATION AND NATIONAL STRATEGY: HISTORICAL CASE STUDIES IN COOPERATION AND CONSENSUS BUILDING.
Mia Brown, National Academies of Sciences, Engineering, and Medicine, United States

IAC-18.E3.2.3
FUTURE STEPS IN INTERNATIONAL COOPERATION FOR SPACE EXPLORATION AND HUMAN SPACEFLIGHT: STAKES AND CHALLENGES FOR EUROPE
Sebastien Moranta, European Space Policy Institute (ESPI), Austria

IAC-18.E3.2.4
EUROPEAN SPACE TRANSPORTATION STRATEGY
Julio Aprea, European Space Agency (ESA), France

IAC-18.E3.2.5
EVOLUTION OF THE ISS IGA FOR THE FUTURE UTILIZATION OF LEO BETWEEN INSTITUTIONAL AND PRIVATE PARTNERS
Juergen Schlutz, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.E3.2.6
EUROPE AND CIS-LUNAR INFRASTRUCTURE DEVELOPMENT IN A POST-ISS CONTEXT – PROSPECTIVES FOR INTERNATIONAL COOPERATION
Djordje Andrijasevic, ASI - Italian Space Agency, Italy

IAC-18.E3.2.7
THE PEAKS OF ETERNAL LIGHT: A NEAR-TERM PROPERTY ISSUE ON THE MOON
Martin Elvis, Harvard-Smithsonian Center for Astrophysics (CfA), United States

IAC-18.E3.2.8
POLITICAL AND ECONOMIC ASPECTS OF ANTARCTIC EXPLORATION AS RELEVANT TO FUTURE MOON MISSIONS
Kate Arkless Gray, PTScientists, United Kingdom

IAC-18.E3.2.9
INTERNATIONAL PARTNERSHIPS IN MARS EXPLORATION
Christopher Carberry, Explore Mars, Inc, United States

IAC-18.E3.2.10
OUTER SPACE ACTIVITIES : COOPERATION THROUGH BEHAVIORAL ECONOMIC MODELS
Devanshu Ganatra, , India

IAC-18.E3.2.11
THE POLITICAL ECONOMY OF THE SPACE AGE
Andrea Sommariva, SDA Bocconi School of Management, Italy

E3.3. Space economy – Stimulating measureable economic activities through space policies and budgets

October 3 2018, 09:45 — CCB Franzius

Co-Chair(s): *Claire Jolly , Organisation for Economic Co-operation and Development (OECD), France; Henry Hertzfeld , Space Policy Institute, George Washington University, United States;*
Rapporteur(s): *Ken Davidian , Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States;*

IAC-18.E3.3.1
A ROADMAP FOR SPACE INDUSTRY DEVELOPMENT THROUGH PUBLIC-PRIVATE COLLABORATION IN AUSTRALIA
Warren Flentje, CSIRO, Australia

IAC-18.E3.3.2 (non-confirmed)
HOW DOES COMMERCIAL SPACE AFFECT INTERNATIONAL SPACE COOPERATION?
Lini ZHOU, National University of Defense Technology, China

IAC-18.E3.3.4
SPACE SERVICES FOR SEA FLEETS EMERGE AS AN ELECTIVE PRIVATE MARKET FOR THE ITALIAN SMALL SATELLITES PLATFORMS
Giacomo Primo Sciortino, Italian Space Agency (ASI), Italy

IAC-18.E3.3.5
THE EUROPEAN R&D PROGRAMME HORIZON 2020: A MULTILEVEL FINANCIAL APPROACH FOR A SUSTAINABLE DEVELOPMENT OF SPACE TECHNOLOGIES AND APPLICATIONS.
Rosario Pavone, SME4SPACE, Belgium

IAC-18.E3.3.6
STRUCTURAL TRANSFORMATION OF A SPACE INDUSTRY, A DEVELOPING COUNTRY CONTEXT, THE CASE OF SOUTH AFRICA
Francois Denner, Space Commercial Services, South Africa

IAC-18.E3.3.7
THE IMPACT OF “BREXIT” ON THE UK AND EUROPEAN SPACE SECTORS
Alyssa Frayling, PricewaterhouseCoopers Advisory, France

IAC-18.E3.3.8
IDENTIFYING OPPORTUNITIES TO INTEGRATE EMERGING NATIONS IN GLOBAL SPACE VALUE CHAINS
Carlos Alvarado Briceño, Central American Association for Aeronautics and Space (ACAE), Costa Rica

IAC-18.E3.3.9
EVALUATING GOVERNMENT'S ROLE IN THE COMMERCIALIZATION OF SPACE
Sara Carioscia, IDA Science and Technology Policy Institute, United States

IAC-18.E3.3.10
GOVERNMENT ENGAGEMENT WITH NEW COMMERCIAL REMOTE SENSING COMPANIES: EVALUATING MODELS FOR PUBLIC DATA BUYS
Mariel Borowitz, Georgia Institute of Technology, United States

IAC-18.E3.3.11
KEYNOTE: REFLECTIONS ON THE ECONOMIC IMPACT OF PROFIT POLICIES BY PUBLIC PROCUREMENT AUTHORITIES IN SPACE AND DEFENCE PROGRAMMES
Eric Morel de Westgaver, ESA - European Space Agency, France

E3.4. Assuring a Safe, Secure and Sustainable Environment for Space Activities

October 3 2018, 14:45 — CCB Franzius

Co-Chair(s): *Ray A. Williamson , , United States;*
Rapporteur(s): Peter Stubbe , German Aerospace Center (DLR), Germany;

IAC-18.E3.4.1
FIRST FRUITS OF THE LONG-TERM SUSTAINABILITY DISCUSSIONS IN UN COPUOS
Peter Martinez, University of Cape Town, South Africa

IAC-18.E3.4.2
CAN THE SPACE INSURANCE INDUSTRY HELP INCENTIVIZE THE RESPONSIBLE USE OF SPACE?
Victoria Samson, Secure World Foundation, United States

IAC-18.E3.4.3
SUSTAINABLE DEVELOPMENT IN SPACE: EXPLORING THE TECHNICAL, LEGAL AND POLITICAL MEANS FOR A GLOBAL SPACE SITUATIONAL AWARENESS ARCHITECTURE
Kiran Nair, Institute of Air and Space Law, McGill University, Canada

IAC-18.E3.4.4
LEADING FROM BEHIND: NGO'S AND SPACE POLICY
Michael Simpson, Secure World Foundation, United States

IAC-18.E3.4.5
ACTIVE DEBRIS REMOVAL AND THE CONCEPT OF ANTICIPATORY SELF-DEFENCE TO ENSURE SAFE, SECURE AND SUSTAINABLE OUTER SPACE ACTIVITIES
Annette Froehlich, LL.M., MAS, European Space Policy Institute (ESPI)German Aerospace Center (DLR), Austria

IAC-18.E3.4.6
ENSURING SUCCESSFUL GLOBAL GOVERNANCE IN THE SPACE SECTOR
Yevgeny Tsodikovich, The Open University of Israel, Israel

IAC-18.E3.4.7
CHALLENGES TO THE SECURITY OF SPACE INFRASTRUCTURE: TRANSATLANTIC PERSPECTIVES
Martin Sarret, European Space Policy Institute (ESPI), Austria

IAC-18.E3.4.8
SPACE SECURITY AND STRATEGIC STABILITY: WHEN, WHERE AND HOW THEY INTERSECT
Massimo Pellegrino, United Nations Office at Geneva, Switzerland

IAC-18.E3.4.9
SPACE TRAFFIC MANAGEMENT: AN ANALYSIS OF THREE YEARS OF DISCUSSIONS AT THE LEGAL SUBCOMMITTEE OF UNCOPUOS
Maximilian Betmann, DLR (German Aerospace Center), Germany

IAC-18.E3.4.10
TOWARD AN INTERNATIONAL ORGANIZATION TO HANDLE A SUSTAINABLE SPACE TRAFFIC MANAGEMENT.
Didier Alary, Airbus Defense and Space, France

IAC-18.E3.4.11
THE EUROPEAN CONTRIBUTION TO ASSURE A SAFE, SECURE AND SUSTAINABLE ENVIRONMENT FOR SPACE ACTIVITIES: THE POLICY AND THE LEGAL PROCESS THAT BROUGHT TO THE EU SST SUPPORT FRAMEWORK AND ITS FUTURE PERSPECTIVES.
Rosa Maria Lucia Parrella, Agenzia Spaziale Italiana (ASI), Italy

IAC-18.E3.4.12
THE OSCAR SMALL SATELLITES SERIES: A CASE STUDY FOR THE DEVELOPMENT OF ENVIRONMENTAL SPACE LAW
Marcia Alvarenga dos Santos, National Institute for Space Research - INPE , Brazil

IAC-18.E3.4.13
GOVERNANCE ASPECTS OF SPACE SUSTAINABILITY: THE ROLE OF EPISTEMIC ACTORS AS ENABLERS OF PROGRESS
Aurélie Trur, Graduate Institute for Policy Studies GRIPS Tokyo, Japan

IAC-18.E3.4.14
THE UAE APPROACH IN ADOPTING THE LONG TERM SUSTAINABILITY GUIDELINES
Naser Alrashedi, UAE Space Agency, United Arab Emirates

IAC-18.E3.4.15
TRAFFIC AHEAD: MEASURES TO MITIGATE SMALLSAT CONGESTION IN LOW EARTH ORBIT
Chris Beauregard, Space Policy Institute, George Washington University, United States

E3.5-E7.6. 33rd Joint IAA/IISL Round Table: Global Cooperation in Planetary Defence

October 4 2018, 09:45 — CCB Franzius

Co-Chair(s): *Alan Harris , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Yu Takeuchi , Japan Aerospace Exploration Agency (JAXA), Japan;*
Rapporteur(s): *Marc Haese , DLR, German Aerospace Center, Germany; Nicola Rohner-Willsch , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*

IAC-18.E3.5-E7.6.1
PLANETARY DEFENCE OPERATIONS UNDER CURRENT INTERNATIONAL LAW
Sergio Marchisio, Italian Space Agency (ASI), Italy

IAC-18.E3.5-E7.6.2
THE WORK OF THE SMPAG AD HOC WORKING GROUP ON LEGAL ISSUES
Irmgard Marboe, University of Vienna, Austria

IAC-18.E3.5-E7.6.3
LEGAL IMPLICATION ON INTERNATIONAL RESPONSE AGAINST NEO THREAT
Masahiko Satoh, Japan Aerospace Exploration Agency (JAXA), Japan

E3.6. Strategic Risk Management for successful space & defence programmes

October 5 2018, 09:45 — CCB Franzius

Co-Chair(s): *Maria-Gabriella Sarah , European Space Agency (ESA), France; Ruediger Suess , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Andrew Court , TNO, The Netherlands; David M. Lengyel , George Washington University, United States;*

IAC-18.E3.6.1
IS IT WORTH THE RISK? – AN ASTRONAUT'S APPROACH TO RISK AWARENESS
Reinhold Ewald, Institute of Space Systems, Universität Stuttgart, Germany

IAC-18.E3.6.2
SYNERGIES BETWEEN NASA HUMAN SYSTEM RISK RESEARCH AND HUMAN SYSTEM RISK MANAGEMENT FOR SPACE EXPLORATION
Michael Canga, NASA, United States

IAC-18.E3.6.5
ERM AND SOCIAL MEDIA RISKS: EVIDENCES FROM INTERNATIONAL SPACE AGENCIES
Massimo De Angelis, Italian Space Agency (ASI), Italy

IAC-18.E3.6.6
DEVELOPMENT OF QUANTITATIVE RISK MANAGEMENT METHOD FOR DECISION MAKING
Hyojung Ahn, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-18.E3.6.7
BARRIERS IN MATURING ENTERPRISE RISK MANAGEMENT (ERM) PROCESSES
David M. Lengyel, George Washington University, United States

IAC-18.E3.6.8
RISK MANAGEMENT FOR MULTINATIONAL SPACE STARTUPS
Megan Kane, Spire Global, Inc., United States

IAC-18.E3.6.9
REDUCING DEVELOPMENT RISKS OF FUTURE SPACE SYSTEMS THROUGH EVIDENCE-BASED TECHNOLOGY ROADMAPPING
Marco Witzmann, Valispace, Germany

IAC-18.E3.6.10
ENTERPRISE/STRATEGIC RISK MANAGEMENT IN NEW SPACE: HOW TO EVALUATE ENTERPRISE RISKS CONCERNING STARTUPS?
Ruediger Suess, , Germany

IAC-18.E3.6.11
RISK ANALYSIS AND MITIGATION FRAMEWORK IN SUPPORT OF SINO-AMERICAN COOPERATIVE SPACE PROJECTS
Kayleigh Gordon, The Ohio State University College of Engineering, United States

IAC-18.E3.6.12
CYBER SECURITY IN SPACE – NEW THREATS FOR SPACE OPERATIONS
Patrick O'Keeffe, University of Kiel, Germany

E4. 52nd IAA HISTORY OF ASTRONAUTICS SYMPOSIUM

Coordinator(s): *Ake Ingemar Skoog , , Germany; Hannes Mayer , Karl Franzens Universität Graz, Austria; Kerrie Dougherty , , Australia; Otfrid Liepack , National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States;*

E4.1. Memoirs & Organizational Histories

October 2 2018, 14:45 — CCB Roselius

Co-Chair(s): *Marsha Freeman , 21st Century Science & Technology, United States; Niklas Reinke , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*
Rapporteur(s): *Michael Ciancone , National Aeronautics and Space Administration (NASA), Johnson Space Center, United States; Rachel Tillman , , United States;*

IAC-18.E4.1.2
THE ASTRONAUT RESCUE AGREEMENT AT 50 YEARS.
Hannes Mayer, Karl Franzens Universität Graz, Austria

IAC-18.E4.1.3
COSPAR, A YOUNG 60-YEAR OLD SPACE RESEARCH ORGANISATION
Jean-Louis Fellous, COSPAR, France

IAC-18.E4.1.5
THE ESA HISTORY PROJECT – LATEST DEVELOPMENTS, IN LIGHT OF RECENT TRENDS IN SPACE HISTORIOGRAPHY
Nathalie Tinjod, European Space Agency (ESA), France

IAC-18.E4.1.6
ANDRÉ LOUIS-HIRSCH (1899-1962) - A SPONSOR FOR EARLY ASTRONAUTICS IN FRANCE
Philippe Varnoteaux, Association Histoires d'espace, France

IAC-18.E4.1.7
KRAFFT EHRICKE AT 100 YEARS: THE MORAL IMPERATIVE OF SPACE EXPLORATION
Marsha Freeman, 21st Century Science & Technology, United States

IAC-18.E4.1.8
THE MAN WHO SHOT DOWN A LONG-RANGE BALLISTIC MISSILE: 100TH ANNIVERSARY OF THE BIRTH OF GRIGORII V. KISUN'KO
Mike Gruntman, Viterbi School of Engineering, USC, United States

IAC-18.E4.1.9
CONTRIBUTIONS TO THE SPACE DYNAMICS STUDIES OF PROFESSOR M. M. NITĂ
Dumitru-Dorin Prunariu, Romanian Space Agency (ROSA), Romania

IAC-18.E4.1.10
ACADEMICIAN V.GLUSHKO – OUTSTANDING RUSSIAN SCIENTIST AND DESIGNER OF ROCKET ENGINEERING. TO 110 ANNIVERSARY OF BIRTHDAY
Vladimir Sudakov, NPO Energomash, Russian Federation

IAC-18.E4.1.11
HARALD VON BECKH, PIONEER OF MICROGRAVITY MEDICAL RESEARCH
Pablo de Leon, University of North Dakota, United States

E4.2. Scientific and Technical Histories

October 4 2018, 09:45 — CCB Roselius

Co-Chair(s): *Karlheinz Rohrwild , Hermann-Oberth-Raumfahrt Museum e.V., Germany; Nathalie Tinjod , ESA, France;*
Rapporteur(s): *John Harlow , Aerojet Rocketdyne, United Kingdom; Radu Rugescu , Association Dedicated to Development in Astronautics (A.D.D.A), Romania;*

IAC-18.E4.2.1
LIFE SAVING ROCKETS IN SWEDEN. A CENTURY OF OPERATION
Ake Ingemar Skoog, , Germany

IAC-18.E4.2.2
PEDRO PAULET: THE ARCHITECT OF THE WORLD'S FIRST LIQUID-FUELED ROCKET
David Villanueva, , Peru

IAC-18.E4.2.3
THE ROCKET IN BRITAIN 1900-1939
John Becklake, , United Kingdom

IAC-18.E4.2.4
KRISTIAN BIRKELAND (1867-1917): THOUGHTS ON HIS SPACE PROPULSION IDEAS AND EXPERIMENTS
Frank H. Winter, National Air and Space Museum, United States

IAC-18.E4.2.5
THE CORRESPONDENCE BETWEEN THE ROCKET PIONEERS JOHANNES WINKLER AND HUGO HÜCKEL
Wolfgang Both, , Germany

IAC-18.E4.2.6
THE DEVELOPMENT OF HERMANN GANSWINDT'S SPACEFLIGHT IDEAS
Michael Tilgner, , Germany

IAC-18.E4.2.7
WHEN THE STUDIES OF GERMAN SPOUSES WERE ENCOURAGED BY THE FRENCH ASTRONAUTIC PIONNEERS (1927-MID 30'S)
Philippe Varnoteaux, Association Histoires d'espace, France

IAC-18.E4.2.8
OUT OF OBSCURITY: 3 PRIVATE ISRAELI ROCKETRY PROGRAMS OF THE 1960'S AND 1970'S
Tal Inbar, The Fisher Institute for Air and Space Strategic Studies, Israel

IAC-18.E4.2.9 (non-confirmed)
FÉLICETTE, THE ONLY SPACE CAT
Jean-Jacques Serra, AAAF, France

E4.3A. Germany's Contribution to Astronautics Post WWII

October 5 2018, 13:30 — CCB Roselius

Co-Chair(s): *Otfrid Liepack , National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States; Vera Pinto Gomes , European Commission, Belgium;*
Rapporteur(s): *Kerrie Dougherty , , Australia; Piero Messina , European Space Agency (ESA), France;*

IAC-18.E4.3A.3
Peter Lüthge - Space Propulsion in Bremen after WWII
OLIVIER HELBIG, , GERMANY

IAC-18.E4.3A.4
THE EARLY GERMAN SCIENCE SATELLITE PROJECTS. FROM AZUR TO ROSAT.
Gerhard Schwehm, ESA (retired), The Netherlands

IAC-18.E4.3A.5
FUTURE IN SPACE – THE PROPRIETARY VISION OF HARRY O. RUPPE
Radu Rugescu, Association Dedicated to Development in Astronautics (A.D.D.A), Romania

E4.3B. "Can you believe they put a man on the Moon?"

October 5 2018, 14:45 — CCB Roselius

Co-Chair(s): *John Charles , NASA Human Research Program, United States;*
Rapporteur(s): *Christophe Rothmund , Airbus Safran Launchers, France; Hannes Mayer , Karl Franzens Universität Graz, Austria;*

IAC-18.E4.3B.7 (non-confirmed)
NASA'S STRUGGLE TO FIND A FOCUS IN 1958, THE ORIGIN OF THE 1961 MOON LANDING GOAL AND THE FIGHT FOR ITS ACCEPTANCE WITHIN THE SCIENTIFIC AND ENGINEERING FRATERNITY 1957-1962.
David Baker, , United Kingdom

IAC-18.E4.3B.8
PRESIDENTS AS RATIONAL ACTORS: NASA AND THE MOON
Jennifer Lauren Napier, Space Generation Advisory Council (SGAC), Austria

IAC-18.E4.3B.9
THE BEGINNING OF THE SPACE AGE: WAS IT JUST A RACE? SPACE SCIENTISTS, ADMINISTRATORS, DIPLOMATS AND SCIENTIFIC CONFERENCES BETWEEN 1958 AND 1970
Piero Messina, European Space Agency (ESA), France

IAC-18.E4.3B.10
WHY SOME PEOPLE JUST WON'T BELIEVE IT? SOCIO-CULTURAL ORIGINS OF MOON LANDING CONSPIRACY THEORIES.
Alfredas Buiko, Vilnius University, Lithuania

IAC-18.E4.3B.11
"THE DISH" WAS NOT THE WHOLE STORY: AUSTRALIA'S ROLE IN APOLLO TELEVISION FROM THE LUNAR SURFACE
Kerrie Dougherty, , Australia

IAC-18.E4.3B.12
GOING TO THE MOON: HOW THE PAST DREW THE FUTURE
Helena Correia Mendonça, Vieira de Almeida & Associados, Portugal

IAC-18.E4.3B.13
THE MOON LANDING AS A WORLDWIDE CASE OF POP SCIENCE
Maria Giulia Andretta, University of Bologna, Italy

E5. 29th IAA SYMPOSIUM ON SPACE AND SOCIETY

Coordinator(s): *Geoffrey Languedoc , Canadian Aeronautics & Space Institute (CASI), Canada; Olga Bannova , University of Houston, United States;*

E5.1. Space Architecture: Habitats, Habitability, and Bases

October 2 2018, 14:45 — CCB Bergen

Co-Chair(s): *Brent Sherwood , Caltech/JPL, United States; Olga Bannova , University of Houston, United States;*
Rapporteur(s): *Anna Barbara Imhof , Liquifer Systems Group (LSG), Austria;*

IAC-18.E5.1.1
FLEXIBLE AND MODULAR ARCHITECTURE FOR THE LUNAR GATEWAY
Neeraj Gupta, Sierra Nevada Corporation, United States

IAC-18.E5.1.2
LOCKHEED MARTIN NEXTSTEP-2 HABITATION STUDY: CISLUNAR GATEWAY ARCHITECTURE STATUS AND RESULTS TO DATE
William Pratt, Lockheed Martin Space Systems Company, United States

IAC-18.E5.1.3
IXION: A WET-LAB HABITAT PLATFORM FOR LEO AND THE DEEP SPACE GATEWAY
Samuel Wald, Nanoracks, United States

IAC-18.E5.1.4
SPACE STATION FOR ORBITAL DEBRIS RECYCLING
Ivan Matas, Vienna University of Technology, Austria

IAC-18.E5.1.5
NASA CENTENNIAL CHALLENGE: THREE DIMENSIONAL (3D) PRINTED HABITAT, PHASE 3
Robert Mueller, National Aeronautics and Space Administration (NASA), United States

IAC-18.E5.1.6
USING SOLAR SINTERING TO BUILD INFRASTRUCTURE ON THE MOON – LATEST ADVANCEMENTS IN THE REGOLIGHT PROJECT
Anna Barbara Imhof, Liquifer Systems Group (LSG), Austria

IAC-18.E5.1.7
FUNGAL BASED BIOCOMPOSITE FOR HABITAT STRUCTURES ON THE MOON AND MARS
Hanna Läkk, European Space Research and Technology Centre, ESA-ESTEC, The Netherlands

IAC-18.E5.1.8
FIBROUS HABITAT STRUCTURE FROM LUNAR BASALT FIBRE
Hanna Läkk, European Space Research and Technology Centre, ESA-ESTEC, The Netherlands

IAC-18.E5.1.9
NANO-CELLULOSE APPLICATION IN THE RADIATION SHIELDING ARCHITECTURE
Monika Lipinska, International Space University, Poland

IAC-18.E5.1.10
FLEXHAB WORKING MODULE - ARCHITECTURAL REQUIREMENTS AND PROTOTYPING FOR A LUNAR BASE ANALOGUE
Manfred Thallner, , Austria

IAC-18.E5.1.11
TECHNICAL RECOMMENDATIONS TO IMPROVE MARS DESERT RESEARCH STATION SAFETY, SIMULATION AND SCIENCE.
Sarah Jane Pell, ESA Topical Team Arts & Science, Australia

IAC-18.E5.1.12
PROPOSAL OF A HABITAT FOR MARTIAN SURFACE AND ANALOG RESEARCH WITH AN ARCHITECTURAL APPROACH
Oscar Ivan Ojeda Ramirez, Universidad Nacional de Colombia, Colombia

IAC-18.E5.1.13
NEXTSTEP PHASE 2 GROUND TEST OVERVIEW AND FLIGHT OPERATIONS SUPPORT
William Othon, National Aeronautics and Space Administration (NASA), Johnson Space Center, United States

E5.2. Is Space R&D Truly Fostering A Better World For Our Future?

October 3 2018, 14:45 — CCB Bergen

Co-Chair(s): *Nona Minnifield Cheeks , National Aeronautics and Space Administration (NASA), Goddard Space Flight Center, United States; Olga Bannova , University of Houston, United States;*
Rapporteur(s): *Anna Barbara Imhof , Liquifer Systems Group (LSG), Austria;*

IAC-18.E5.2.1
A SURVEY ON THE CAPACITIES OF THE ITALIAN SPACE SECTOR TO PRODUCE TECHNOLOGY TRANSFERS INTO SPACE-RELATED AND SPACE-ENABLED BUSINESS
Giacomo Primo Sciortino, Italian Space Agency (ASI), Italy

IAC-18.E5.2.2
SPACE DEVELOPMENTS AND TECHNICAL INNOVATION-EMPIRICAL ANALYSIS BASED ON PROVINCIAL PANEL DATA OF CHINA
Ning Jia, China Aerospace Science and Technology Corporation (CASC), China

IAC-18.E5.2.3
RESEARCH ON THE INDUSTRIAL IMPACT OF AEROSPACE DISRUPTIVE TECHNOLOGY
Xia Yu, China Academy of Launch Vehicle Technology(CALT), China

IAC-18.E5.2.4
PROGRESS AND CHALLENGES IN APPLYING SPACE TECHNOLOGY IN SUPPORT OF THE SUSTAINABLE DEVELOPMENT GOALS
Danielle Wood, Massachusetts Institute of Technology (MIT), United States

IAC-18.E5.2.5 (non-confirmed)
THE IMPORTANCE OF THE LATIN AMERICAN APPROACH IN THE DEVELOPMENT OF SPACE TECHNOLOGICAL CAPABILITIES: A VIEWPOINT FROM MEXICO
Sofía Andrea Huerta Ramírez, Universidad Nacional Autónoma de México, Mexico

IAC-18.E5.2.6
SPIN-OFFS FROM SPACE TECHNOLOGY TO CULTURAL LIFE
Jong-Bum Kim, Korea Aerospace Research Institute (KARI), Korea, Republic of

IAC-18.E5.2.7
URBAN PLANNING USING SATELLITE IMAGE ANALYSIS: A PERUVIAN CASE
Victor Romero-Alva, Image Processing Research Laboratory (INTI-Lab). Universidad de Ciencias y Humanidades - UCH, Peru

IAC-18.E5.2.8
SPACE DATA FOR PREDICTING CLIMATE CHANGE AND DESERTIFICATION IN AFRICA: CASE STUDY OF THE SAHEL REGION.
ABUBAKAR BABAGANA, SEABED INTERNATIONAL, Nigeria

IAC-18.E5.2.9
SPATIOTEMPORAL INVESTIGATIONS OF OIL GROUND SPILLS AND MODIS FIRE PRODUCTS IN NEAR REAL-TIME
Michael Gbenga Ogungbuyi, University of Cape Town, South Africa

IAC-18.E5.2.10
USING SPACE FOR DISASTER MANAGEMENT IN EMERGING SPACE STATES: A CRITICAL ASSESSMENT
Wasanchai Vongsantivanich, Geo-Informatics and Space Technology Development Agency (GISTDA), Thailand

IAC-18.E5.2.11
THE NOT SO FUNNY PARALLEL: HUMAN SPACE EXPLORERS AND DISASTER-DISPLACED PEOPLE
Jesper Jorgensen, SpaceArch, Denmark

E5.3. Contemporary Arts Practice and Outer Space: A Multi-Disciplinary Approach

October 3 2018, 09:45 — CCB Bergen

Co-Chair(s): *Richard Clar , Art Technologies, United States; Tibor Balint , Art Center College of Design, United States;*
Rapporteur(s): *Melanie King , Royal College of Art, United Kingdom;*

IAC-18.E5.3.1
THE CULTURAL IMPACT OF SPACE EXPLORATION FROM AN ARTIST´S PERSPECTIVE
Michael Najjar, , Germany

IAC-18.E5.3.2
ANCIENT LIGHT: ALTERING PERCEPTIONS OF ASTRONOMICAL IMAGING THROUGH EXPLORATIONS IN PHOTOGRAPHIC MATERIALITY.
Melanie King, Royal College of Art, United Kingdom

IAC-18.E5.3.3
PILLOW TALK---CURATING DELIGHT FOR ASTRONAUTS
Tibor Balint, Art Center College of Design, United States

IAC-18.E5.3.5 (non-confirmed)
NEW MODES OF ADDRESSING OUTER SPACE
Heiko Schmid, , Switzerland

IAC-18.E5.3.6
HOW TO SEE HUMAN INTERACTION WITH SPACE AS ART: ONE OF MANY PERSPECTIVES
Hannah Halcro, Concordia University, Canada

IAC-18.E5.3.7
LUNAR HISTORIC AND SCIENTIFIC SITES: TECHNICAL REASONS AND LEGAL BASES TO PROTECT
Robin J. Frank, International Institute of Space Law (IISL), United States

IAC-18.E5.3.8 (non-confirmed)
MOONMARS EXPLORATION THROUGH ARTS: ARTSCIENCE PROJECTS
Bernard Foing, ESA/ESTEC, ILEWG & VU Amsterdam, The Netherlands

IAC-18.E5.3.9 (non-confirmed)
ON BECOMING EXTRA-PLANETARY
Jol Thomson, , United Kingdom

IAC-18.E5.3.10
THE ART OF MEDIATION THROUGH 'THE UNIVERSE' – A DIALOGUE BETWEEN AN ENGINEER AND A DESIGNER AT CERN
Yuri Tanaka, Tokyo University of the Arts, Japan

IAC-18.E5.3.11
`COGITO IN SPACE': FROM THE EARTH-CENTRED TO THE COSMOS-WIDE PERSPECTIVE
Daniela de Paulis, , The Netherlands

E5.4. Space Assets and Disaster Management

October 4 2018, 09:45 — CCB Bergen

Co-Chair(s): *Geoffrey Languedoc , Canadian Aeronautics & Space Institute (CASI), Canada; Jillianne Pierce , Space Florida, United States;*

IAC-18.E5.4.2
CAPITALIZING ON GEOSPATIAL TECHNIQUES TO CURB URBAN WASTE IN AFRICA
Oniosun Temidayo Isaiah, Federal University of Technology Akure, Ondo state, Nigeria, Nigeria

IAC-18.E5.4.3
SPACE-BASED DATA FOR CLIMATE CHANGE ADAPTATION: IDENTIFYING PATHWAYS FOR ACCESS AND USE IN EARLY AND NON-SPACE-FARING COUNTRIES
Danny Bednar, University of Western Ontario (UWO), Canada

IAC-18.E5.4.4
USE OF TECHNOLOGY ACCEPTANCE MODEL IN ANALYSING THE UTILISATION OF SATELLITE-AIDED TOOLS FOR DISASTER MANAGEMENT IN COUNTRIES WITH DIFFERENT DEVELOPMENTAL STATUS
PATRICIA KHWAMBALA, Cape Peninsula University of Technology (CPUT), South Africa

IAC-18.E5.4.5
DESIGN OF A SPACE BASED PLATFORM FOR EARTHQUAKE PREDICTION USING PRECURSORS INVESTIGATION
Masoud Khoshsima, Satellite Research Institute, Iranian Space Research Center, Iran

IAC-18.E5.4.6
DISASTER MANAGEMENT: SPACE-BASED SOLUTIONS FOR DEVELOPING NATIONS
Isidora Casas del Valle Pacheco, International Space University, Chile

IAC-18.E5.4.7
SATELLITE COMMUNICATION SYSTEM FOR DISASTER RESPONSE IN BHUTAN
Cheki Dorji, LaSEINE, Kyushu Institute of Technology, Japan

IAC-18.E5.4.8
DIGITAL DIPLOMACY: THE USE OF SPACE TECHNOLOGIES IN ENHANCING COMPLIANCE TO INTERNATIONAL REGIMES
S.W. Chiu, University of Oxford, United Kingdom

IAC-18.E5.4.9
A FUTURE CARRINGTON EVENT: ADOPTING A DETERMINISTIC APPROACH TO INTERNATIONAL TELECOMMUNICATIONS ISSUES
Samuel Naef, International Space University (ISU), France

IAC-18.E5.4.10
ANALYSIS OF THE ENVIRONMENTAL IMPACT OF THE SAMA FOREST FIRE IN TARIJA BOLIVIA
Natalia Indira Vargas-Cuentas, Beihang University (BUAA), China

IAC-18.E5.4.11
ANALYSIS OF LANDSLIDES IN PERU BASED ON SATELLITE IMAGES TO IDENTIFY DANGER ZONES
Avid Roman-Gonzalez, Image Processing Research Laboratory (INTI-Lab). Universidad de Ciencias y Humanidades - UCH, Peru

IAC-18.E5.4.12
MOON VILLAGE AS A DISASTER MANAGEMENT ASSET
James Burke, The Planetary Society, United States

E5.5. Space Societies, Professional Associations and Museums

October 4 2018, 14:45 — CCB Bergen

Co-Chair(s): *Ines Prieto , SEMECCEL Cité de l'Espace, France; Jean-Baptiste Desbois , SEMECCEL Cité de l'Espace, France; Scott Hatton , The British Interplanetary Society, United Kingdom;*
Rapporteur(s): *Minoo Rathnasabapathy , Massachusetts Institute of Technology (MIT), United States;*

IAC-18.E5.5.1
THE SPACE GENERATION ADVISORY COUNCIL: CAPACITY BUILDING AND THE SPACE GENERATION FORUMS
Jennifer Lauren Napier, Space Generation Advisory Council (SGAC), Austria

IAC-18.E5.5.2
INNOVATIVE WAYS FOR A SPACE MUSEUMS TO WORK WITH STUDENTS THROUGH EUROPEAN PROJECTS
Ines Prieto, SEMECCEL Cité de l'Espace, France

IAC-18.E5.5.3
GENDER EQUALITY IN THE ITALIAN SPACE SECTOR: A STUDY CASE OF THE WIA ROME LOCAL GROUP
Maria Libera Battagliere, ASI - Italian Space Agency, Italy

IAC-18.E5.5.4
SPACE AND SOCIETY – INITIAL SPACE EDUCATION IN CROATIA
Goran Nikolasevic, , Croatia

IAC-18.E5.5.5
"FROM THE OUTBACK TO OUTER SPACE": A CASE STUDY OF A SPACE EXHIBITION AS AN IAC OUTREACH PROJECT
Kerrie Dougherty, , Australia

IAC-18.E5.5.6
IAC 2016, A TURNING POINT FOR MEXICO FOR ITS DREAM TO REACH SPACE.
Luis Ángel Castellanos Velasco, Universidad Nacional Autónoma de México, Mexico

IAC-18.E5.5.7
CURATING SPACE MUSEUMS USING INTERSECTIONAL DESIGN
Wael Bazzi, , United Arab Emirates

IAC-18.E5.5.8
BUILDING LEVERAGE FOR A SPACE AGENDA CREATED IN THE CIVIL SOCIETY: THE EXPERIENCE OF ACAE IN CENTRAL AMERICA
Carlos Alvarado Briceño, Central American Association for Aeronautics and Space (ACAE), Costa Rica

IAC-18.E5.5.9
THE COLOMBIAN SPACE FOUNDATION: AN ATTEMPT TO DEVELOP THE SPACE SECTOR
Camilo Guzman Gomez, UNIVERSIDAD SERGIO ARBOLEDA, Colombia

IAC-18.E5.5.10
CUBERS, STUDENT AND NON-PROFESSIONAL ASSOCIATION FOR CUBESAT DESIGN, MANUFACTURING AND APPLICATION TO FORM AGILE AND LOW COST R&D SECTION FOR INDUSTRY
Sajjad Ghazanfarinia, Satellite Research Institute, Iranian Space Research Center, Iran

E6. IAF BUSINESS INNOVATION SYMPOSIUM

Coordinator(s): *Ken Davidian, Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States;*

E6.1. Entrepreneurship and Innovation: The Practitioners' Perspectives

October 2 2018, 09:45 — CCB Roselius

Co-Chair(s): *Gary Martin , Luxembourg Ministry of the Economy, Luxemburg;*

IAC-18.E6.1.1
STELLARSTATION: EXPANDING MISSION POSSIBILITIES THROUGH GROUND STATION SHARING
Naomi Kurahara, Infostellar, Japan

IAC-18.E6.1.2
BRINGING SPACE ONLINE: THE BENEFITS OF USING THE GDS-LIKE ARCHITECTURE SYSTEM FOR SMALLSAT MARKET
Ksenia Lisitsyna, Precious Payload, Russian Federation

IAC-18.E6.1.4
GAME-CHANGING SPACE SYSTEM INTERFACE APPROACH WITH STANDARD POTENTIAL AND SPACE ECO-SYSTEM IMPACT
Joerg Kreisel, JOERG KREISEL International Consultant (JKIC), Germany

IAC-18.E6.1.5
A 21ST S.T.E.A.M.E.D ACADEMY BUSINESS MODEL CREATING EDUTAINMENT IN EXPERIENTIAL AND SIMULATION-BASED LEARNING AND EXPONENTIAL TECHNOLOGIES TO TRAIN NEXTGEN LEADERS AND ANALOG ASTRONAUTS
Susan Ip-Jewell, Mars Academy USA, United States

IAC-18.E6.1.6
FAZADOTIR, FROM A STARTUP IN SPACE EDUCATION TO A PLATFORM FOR CUBESAT MARKET
Sajjad Ghazanfarinia, Satellite Research Institute, Iranian Space Research Center, Iran

IAC-18.E6.1.7
HIGH ALTITUDE PLATFORMS AS A COST-EFFECTIVE ALTERNATIVE TO MASSIVE SATELLITE CONSTELLATIONS, FOR BANDWIDTH DELIVERY TO UNDERSERVED AREAS
Thomas Olson, Center for Space Commerce and Finance, United States

IAC-18.E6.1.8
A NEW SPACEPLANE VENTURE COMPANY IN JAPAN - CHALLENGES IN THE LAST FRONTIER BOTH DEVELOPMENT AND BUSINESS
Koichi Yonemoto, Kyushu Institute of Technology, Japan

IAC-18.E6.1.9
SATSEARCH.CO: THE DATA LAYER FOR THE SPACE INDUSTRY
Kartik Kumar, satsearch.co, The Netherlands

IAC-18.E6.1.10
GUIDE TO LEGAL COMPLIANCE FOR A SPACE STARTUP
Megan Kane, Spire Global, Inc., United States

IAC-18.E6.1.11
A MARKET ANALYSIS FOR A PRIVATELY OWNED AND OPERATED SPACE STATION
Benjamin Corbin, IDA Science and Technology Policy Institute, United States

IAC-18.E6.1.12
NEWSPACE PROPULSION START-UP: THRUSTME'S JOURNEY FROM INVENTION TO INNOVATION
Ane Aanesland, ThrustMe, France

E6.2. Finance and Investment: The Practitioners' Perspectives

October 3 2018, 14:45 — CCB Roselius

Co-Chair(s): *Joerg Kreisel , JOERG KREISEL International Consultant (JKIC), Germany;*
Rapporteur(s): *Ian Christensen , Secure World Foundation, United States;*

IAC-18.E6.2.1
START-UP SPACE: GLOBAL INVESTMENT TRENDS
Carissa Christensen, Bryce Space and Technology, United States

IAC-18.E6.2.2
WHAT CAN EUROPEAN UNION DO FOR YOUR SPACE START-UP?
Tina Mede, European Commission, Belgium

IAC-18.E6.2.3
ENTREPRENEURSHIP AND PRIVATE INVESTMENT IN THE EUROPEAN SPACE SECTOR
Sebastien Moranta, European Space Policy Institute (ESPI), Austria

IAC-18.E6.2.4
INTRODUCTION TO THE COMMERCIAL SPACE INNOVATION INITIATIVE
Ken Davidian, Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States

IAC-18.E6.2.5
MAKING NASA MORE BUSINESS FRIENDLY: AN SBIR/STTR CASE STUDY
Jennifer Gustetic, NASA, United States

IAC-18.E6.2.6
RESEARCH ON THE INFLUENCE OF CHINA'S COMMERCIAL SPACE FLIGHT ON THE ECONOMIC AND SOCIAL DEVELOPMENT OF THE REGIONS ALONG THE BELT AND ROAD
LIANG MA, China Academy of Aerospace Systems Science and Engineering, China

IAC-18.E6.2.7
OPPORTUNITIES AND CHALLENGES FOR NEW SPACE IN JAPAN
Misuzu Onuki, Space Access Corporation, Japan

IAC-18.E6.2.8
CORPORATE VENTURE INVESTMENT AS A DEVELOPMENT TOOL FOR NEW SPACE COMPANIES SUPPORT
Dmitry Payson, ROSCOSMOS, Russian Federation

IAC-18.E6.2.9
FIRST CENTRAL AMERICAN SATELLITE: FINANCIAL SUPPORT IN A NON–AEROSPACE DEVELOPED COUNTRY
Yolanda Ceciliano-Jiménez, Central American Association for Aeronautics and Space (ACAE), Costa Rica

IAC-18.E6.2.10
SPACE SECTOR AS A CATALYST PORT TO ECONOMIC DEVELOPMENT ON LATIN AMERICA
Yair Israel Piña López, Universidad Nacional Autónoma de México, Mexico

IAC-18.E6.2.11
SPACE3AC DOWNSTREAM ACCELERATOR: SUMMARY OF RESULTS FROM 2016-2018
Krzysztof Kanawka, Blue Dot Solutions, Poland

IAC-18.E6.2.12
NEW SPACE INITIATIVES IN PIEDMONT REGION SUPPORTING INNOVATION AND INTERNATIONALIZATION OF SME'S: RECENT EXPERIENCES AND PERSPECTIVES
Erika Manis, , Italy

E6.3. Innovation: The Academics' Perspectives

October 5 2018, 09:45 — CCB Roselius

Co-Chair(s): *Ken Davidian , Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States; Paola Belingheri , Women in Aerospace Europe (WIA-E), The Netherlands;*
Rapporteur(s): *Luigi Scatteia , PricewaterhouseCoopers Advisory, France;*

IAC-18.E6.3.1
A Competition for Un-engineering
Sajjad Ghazanfarinia, Satellite Research Institute, Iranian Space Research Center, Iran

IAC-18.E6.3.2
New Space: Impacts of Innovative Concepts in Satellite Development on the Space Industry
Stephanie Koechel, Technical University of Munich, Germany

IAC-18.E6.3.3
New Space and Agile Innovation: Transforming Networks, Organisations and People
Matjaz Vidmar, The University of Edinburgh, United Kingdom

IAC-18.E6.3.4
Institutional Logics and Industrial Dynamics in the Dutch Space Sector
Daniel Sagath, Vrije Universiteit Amsterdam, The Netherlands

IAC-18.E6.3.5
Fostering innovation via Ambidexterity in Aerospace Organizations
Christine Joseph, Massachusetts Institute of Technology (MIT), United States

IAC-18.E6.3.6
The Effects Of Institutional Logics On Entrepreneurship In The Finnish Space Sector
Christopher Vasko, European Space Agency (ESA), France

IAC-18.E6.3.7
From new space to big space: How commercial space dream is becoming a reality?
Gil Denis, Airbus Defence and Space, France

IAC-18.E6.3.8
Placeholder for the Winner of the Space is Business Paper Writing Competition
Ken Davidian, Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States

E7. 61st IISL COLLOQUIUM ON THE LAW OF OUTER SPACE

Coordinator(s): *Catherine Doldirina , International Institute of Space Law (IISL), Italy; Diane Howard , International Institute of Space Law (IISL), United States; Lesley Jane Smith, Leuphana University of Lüneburg/Weber-Steinhaus & Smith, Germany;*

Publication officer(s): *PJ Blount, University of Luxembourg, Luxemburg; Rafael Moro-Aguilar, Orbspace, Austria;*

E7.1. 10th Nandasiri Jasentuliyana Keynote Lecture on Space Law and Young Scholars Session

October 2 2018, 09:45 — Bremen 3

Co-Chair(s): *Kai-Uwe Schrogl , European Space Agency (ESA), France; Lesley Jane Smith , , Germany;*
Rapporteur(s): *Christopher Johnson , Secure World Foundation, United States;*

IAC-18.E7.1.1
KEYNOTE: SPACE LAW AND INTERNATIONAL ORGANISATIONS
Marco Ferrazzani, European Space Agency (ESA), France

IAC-18.E7.1.2
INDIA'S DRAFT 'SPACE ACTIVITIES BILL': IMPLICATIONS FOR THE COMMERCIAL SPACE INDUSTRY
Narayan Prasad Nagendra, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

IAC-18.E7.1.3
FROM THE UNILATERAL ACTS OF STATES TOWARDS UNILATERALISM IN SPACE LAW
Tugrul Cakir, , France

IAC-18.E7.1.5
CAN JAPAN LAUNCH ITSELF INTO BECOMING A LEADER IN GLOBAL SPACE BUSINESS WITH ITS NEW SPACE LEGISLATION?
Masaya Uchino, Keio University, Japan

IAC-18.E7.1.6
THE CONCEPT OF LAUNCHING STATE IN DEMOCRATIZED NEWSPACE
Hamza Hameed, Unidroit, Italy

IAC-18.E7.1.7
LEGAL AND POLICY CHALLENGES FOR USING BLOCKCHAIN TO ESTABLISH PROPERTY RIGHTS IN OUTER SPACE
Nathan Johnson, , United States

IAC-18.E7.1.8
LEGAL CHALLENGES OF SPACE 4.0: THE FRAMEWORK CONDITIONS OF LEGAL CERTAINTY AMONG STATES, INTERNATIONAL ORGANISATIONS AND PRIVATE ACTORS IN THE CHANGING LANDSCAPE OF SPACE ACTIVITIES
Gina Petrovici, University of London, Germany

IAC-18.E7.1.9
CAN "GIANT" AND "TINY" CO-EXIST PEACEFULLY? THE DESIGN OF RULES OF PREVENTING COLLISION IN OUTER SPACE UNDER THE BOOM OF MICRO-SATELLITES.
Huxiao Yang, , China

IAC-18.E7.1.10
RECONSIDERING THE LIABILITY REGIME UNDER SOUTH AFRICAN NATIONAL SPACE LEGISLATION
Alexander Gairiseb, University of Cape Town, South Africa

IAC-18.E7.1.11
A COMPARATIVE ANALYSIS BETWEEN THE ACT ON THE EXPLORATION AND USE OF SPACE RESOURCES (LUXEMBURG) AND THE COMMERCIAL SPACE LAUNCH COMPETITIVENESS ACT (U.S.): WAYS FORWARD FOR NATIONAL SPACE LAW
Yangzi Tao, Keio University, Japan

IAC-18.E7.1.12
THE 'NON-APPROPRIATION' PRINCIPLE IN OUTER SPACE: A ROMAN INTERPRETATION
Andrea Capurso, , The Netherlands

IAC-18.E7.1.13
BEE-FORE THE SWARM – SWARM TECHNOLOGIES' UNAUTHORISED DEPLOYMENT OF SMALLSATS AND ART. VI OF THE OUTER SPACE TREATY: SUGGESTIONS FOR AN ASSESSMENT OF INTERNATIONAL RESPONSIBILITY IN OUTER SPACE
Scarlet Wagner, Lund University, Sweden

IAC-18.E7.1.14
REGULATING REMOTE SENSING IN NATIONAL SPACE LEGISLATION TO INCREASE LEGAL CERTAINTY ON AN INTERNATIONAL LEVEL
Vincent Seffinga, , The Netherlands

IAC-18.E7.1.15
DO NATIONAL SPACE LAWS LOOK BEYOND LIABILITY FOR DAMAGE? – A CASE OF INDIA
Upasana Dasgupta, Institute of Air and Space Law, McGill University, Canada

IAC-18.E7.1.16
BACK TO THE MOON: LEGAL CHALLENGES FOR FUTURE LUNAR EXPLORATION.
Antonino Salmeri, International Institute of Air and Space Law, Leiden University, The Netherlands

E7.2. Financing space: Procurement, competition and regulatory approach

October 2 2018, 14:45 — Bremen 3

Co-Chair(s): *Audrey Powers , Blue Origin LLC, United States; Ingo Baumann , , Germany;*
Rapporteur(s): *Gina Petrovici , ECSL, Germany;*

IAC-18.E7.2.1
THE U.S. PROCUREMENT MODEL AS A TOOL FOR GROWING PRIVATE INDUSTRY
Mark Sundahl, Cleveland State University, United States

IAC-18.E7.2.2
PUBLIC PROCUREMENT RULES, FORMS OF FINANCING AND THEIR IMPACT ON COMPETITION IN THE SPACE FIELD: A GENERAL OVERVIEW WITH A FOCUS ON THE ITALIAN LEGISLATIVE FRAMEWORK AND ITS PRACTICAL IMPLEMENTATION.
Marina Gagliardi, Italian Space Agency (ASI), Italy

IAC-18.E7.2.3
USING PUBLIC-PRIVATE PARTNERSHIPS TO FINANCE VERY LARGE SPACE PROJECTS
Milton Smith, Sherman & Howard, LLC, United States

IAC-18.E7.2.4
THE SPACE PROTOCOL OF THE CAPE TOWN CONVENTION: AN INTERNATIONAL SECURED TRANSACTIONS REGIME FOR SPACE ASSETS
Anna Veneziano, Unidroit, Italy

IAC-18.E7.2.5
SO, YOU WANT TO BUY A SPACE COMPANY?
Brendan Cohen, Cleary Gottlieb Steen & Hamilton LLP, United States

IAC-18.E7.2.6
INSURANCE INVOLVEMENT ON NEW SPACE ACTIVITIES DEVELOPMENTS CÉCILE GAUBERT LAWYER - PARIS BAR
Cecile Gaubert, , France

IAC-18.E7.2.7
SPACE ACTIVITIES IN EUROPE THROUGH THE LENSES OF EU COMPETITION LAW
Ioanna Thoma, European Space Agency (ESA), France

IAC-18.E7.2.8
THE EUROPEAN UNION AND SPACE - SPACE FOR COMPETITION?
Frans von der Dunk, University of Nebraska-Lincoln, The Netherlands

IAC-18.E7.2.9
MITIGATION OF ANTI-COMPETITIVE BEHAVIOUR IN TELECOMMUNICATION SATELLITES AND MANAGEMENT OF NATURAL MONOPOLIES.
Thomas Green, Space Industry Association of Australia, Australia

IAC-18.E7.2.10
LEGAL AND REGULATORY APPROACHES TO GROWING THE UK SPACE ECONOMY: REVOLUTION OR EVOLUTION?
Christopher Newman, Northumbria University, United Kingdom

IAC-18.E7.2.11
THE "B&R INITIATIVE" PROVIDES OPPORTUNITIES FOR CHINA TO DOMINATE SPACE COOPERATION IN ASIA? - AN ANALYSIS OF LEGAL CHALLENGES
Mingyan Nie, Faculty of Law, Nanjing University of Aeronautics and Astronautics, China

IAC-18.E7.2.12
TO FULLY BRIDGE THE DIGITAL DIVIDE BY 2027, MAKING INTERNET ACCESS AVAILABLE AND AFFORDABLE FOR EVERYONE- THE NON-GSO CONSTELLATION RESPONSE
Yvon Henri, Oneweb, United Kingdom

E7.3. Integrated space applications, EO telecoms navigation

October 3 2018, 09:45 — Bremen 3

Co-Chair(s): *Catherine Doldirina , International Institute of Space Law (IISL), Italy; Setsuko Aoki , Keio University, Japan;*
Rapporteur: *Andrea Capurso, Leiden University, The Netherlands*

IAC-18.E7.3.1
BIG DATA FLOW FROM SPACE TO THE EU: OPEN ACCESS AND OPEN DISSEMINATION POLICY VS. THE COMMON EUROPEAN DATA SPACE
Maria Elena De Maestri, Università degli Studi di Genova, Italy

IAC-18.E7.3.2
SPACE APPLICATIONS FOR AGRICULTURAL PURPOSES: RELEVANT LEGAL FRAMEWORK
Catherine Doldirina, International Institute of Space Law (IISL), Italy

IAC-18.E7.3.3
EARTH OBSERVATION DATA AND SERVICES – NEW LEGAL ISSUES
Ingo Baumann, BHO Legal , Germany

IAC-18.E7.3.4
PRIVACY LAW ISSUES RAISED BY NEW SPACE DEVELOPMENTS
Laura Keogh, , Ireland

IAC-18.E7.3.5
LEGAL RIGHTS AND POSSIBILITIES TO ACCESS SATELLITE DATA FOR A NON-MEMBER STATE OF SPACE COMMUNITY: CASE OF REPUBLIC OF SERBIA
Anja Nakarada Pecujlic, Cologne University, Germany

IAC-18.E7.3.6 (non-confirmed)
COPERNICUS AND EUROPEAN SPACE SECURITY: LEGAL CHALLENGES WITH OPEN DATA POLICIES
Sandra Cabrera Alvarado, University of Luxembourg, Luxemburg

IAC-18.E7.3.7
INTELLECTUAL PROPERTIES OF THE SATELLITE IMAGES ANALYZED BY A.I.
Mihoko Shintani, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.E7.3.8
IMPLICATIONS OF MEGA CONSTELLATIONS OF SMALL SATELLITES ON EARTH OBSERVATION REGULATIONS AND POLICIES
Atsuyo Ito, , Japan

IAC-18.E7.3.9
WORKING WITH THE JAPANESE NEW REMOTE SENSING DATA ACT
Daisuke Saisho, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.E7.3.10
INTERNATIONAL LAW COMMISSION'S 2016 DRAFT ARTICLES ON "PROTECTION OF PERSONS IN THE EVENT OF DISASTERS" AS A LEGAL BASIS FOR MITIGATION AGAINST NEAR EARTH OBJECTS/ASTEROIDS
Behnam Salem Condory, , Iran

IAC-18.E7.3.11
INTELLECTUAL PROPERTY PROTECTION, A FINANCIAL ASPECT OF THE ISS
Gabriella Catalano, Sapienza University of Rome, Italy

IAC-18.E7.3.12
TWO REGIMES APPLICABLE: NEW FORMS OF THE USE OF THE SPACE AND THE RADIO FREQUENCY SPECTRUM
Mahulena Hofmann, University of Luxembourg, Luxemburg

E7.4. Space law at Unispace +50: consequences and future perspectives

October 3 2018, 14:45 — Bremen 3

Co-Chair(s): *Bernhard Schmidt-Tedd , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Yun Zhao , The University of Hong Kong, Hong Kong;*
Rapporteur: *Antonio Salmeri, Leiden University, The Netherlands*

IAC-18.E7.4.1
UNISPACE+60: EVOLUTION OF LONG-TERM SUSTAINABILITY (LTS) GUIDELINES INTO CUSTOMARY LEGAL NORMS
Larry Martinez, International Institute of Space Law (IISL), United States

IAC-18.E7.4.2
A VITAL ARTERY OR A STENT NEEDING REPLACEMENT? A GLOBAL SPACE GOVERNANCE SYSTEM WITHOUT THE OUTER SPACE TREATY?
Ram S. Jakhu, McGill Univeristy, Canada

IAC-18.E7.4.3
ARMED CONFLICT IN OUTER SPACE: INTERNATIONAL HUMANITARIAN LAW AS A SOLUTION?
Yun Zhao, The University of Hong Kong, Hong Kong

IAC-18.E7.4.4
LEGAL PERSPECTIVES FOR THE FURTHER DEVELOPMENT OF THE FIVE UNITED NATIONS TREATIES ON OUTER SPACE IN LIGHT OF RISING MULTISTAKEHOLDERISM
Martina Smuclerova, Charles University, Czech Republic

IAC-18.E7.4.5
UNISPACE +50: TIME FOR THE MOON TREATY
Dennis O'Brien, Space Treaty Project, United States

IAC-18.E7.4.6
NORMATIVE REFERENCES TO NON-LEGALLY BINDING INSTRUMENTS IN NATIONAL SPACE LAWS: A RISK-BENEFIT ANALYSIS IN THE CONTEXT OF DOMESTIC AND PUBLIC INTERNATIONAL LAW
Alexander Soucek, European Space Agency (ESA), The Netherlands

IAC-18.E7.4.7
INTERNATIONAL LEGAL ASPECTS ON SUSTAINABLE DEVELOPMENT OF OUTER SPACE ACTIVITIES: COMBINE SAFETY AND EFFECTIVENESS IN THE LONG-TERM
Irina Chernykh, Peoples' Friendship University of Russia (RUDN University), Russian Federation

IAC-18.E7.4.8
A FRESH VIEW ON THE OUTER SPACE TREATY AND ON THE EVOLUTION OF THE POST-AGENDA 2030 GOALS
Annette Froehlich, LL.M., MAS, European Space Policy Institute (ESPI) German Aerospace Center (DLR), Austria

IAC-18.E7.4.9
THE PROMOTION OF (SPACE-BASED) TELEMEDICINE VIA UNISPACE+50
Edward Burger, European Space Policy Institute (ESPI), Austria

IAC-18.E7.4.10
REFLECTIONS ON THE INTERNATIONAL LEGAL FRAMEWORK GOVERNING RE-ENTRY OF SPACE OBJECTS
Xiaodan Wu, China Central University of Finance and Economics, China

IAC-18.E7.4.11
EVOLVING NORMS ON PRE-LAUNCH NOTIFICATIONS OF SPACE LAUNCH VEHICLES: HISTORICAL PERSPECTIVE IN THE CONTEXT OF UNISPACE+50 THEMATIC PRIORITY THREE
Kazushi Kobata, Japan Aerospace Exploration Agency (JAXA), Japan

IAC-18.E7.4.12
"BELT AND ROAD" SPACE INFORMATION CORRIDOR: OPPORTUNITIES AND CHALLENGES FROM LEGAL PERSPECTIVES
Kang Duan, China Great Wall Industry Corporation (CGWIC), China

IAC-18.E7.4.13
International Cooperation in Space is Essential in Our Time
José Monserrat-Filho, Brazilian Space Agency (AEB), Brazil

E7.5. The relationship between space law and cyberlaw, and other recent developments in space law

October 5 2018, 09:45 — Bremen 3

Co-Chair(s): *Larry Martinez , International Institute of Space Law (IISL), United States; Stephan Hobe , University of Cologne, Germany;*
Rapporteur(s): *Simona Spassova , University of Luxembourg, Luxemburg;*

IAC-18.E7.5.1
CYBER LAW AND OUTER SPACE (ACTIVITIES): LEGAL AND REGULATORY CHALLENGES
Stephan Hobe, University of Cologne, Germany

IAC-18.E7.5.2
IN SEARCH OF AN INTERNATIONAL PUBLIC ORDER FOR CYBER ACTIVITIES
Stefan A. Kaiser, , Germany

IAC-18.E7.5.3
IDENTIFYING THE SCOPE OF THE APPLICABLE INTERNATIONAL LAW RULES TOWARDS MALICIOUS CYBER ACTIVITIES AGAINST SPACE ASSETS
Setsuko Aoki, Keio University, Japan

IAC-18.E7.5.4
CYBER SPACE AND THE USE OF FORCE: APPLICABILITY OF JUS AD BELLUM AND JUS IN BELLO RULES TO CYBER-ATTACKS AGAINST SPACE SYSTEMS
Fabio Tronchetti, Beihang University (BUAA), China

IAC-18.E7.5.5
THAT ESCALATED QUICKLY: THE CYBER-ASAT CONUNDRUM
PJ Blount, University of Luxembourg, Luxemburg

IAC-18.E7.5.6
CRITICAL ASSESSMENT OF SPACE LAW RELATED RULES OF TALLINN MANUAL 2.0 ON THE INTERNATIONAL LAW APPLICABLE TO CYBER OPERATIONS
S. Hadi Mahmoudi, Shahid Beheshti University, Iran

IAC-18.E7.5.7
THE ROLE OF THE ITU IN THE CREATION OF INTERNATIONAL LEGAL NORMS ON CYBERSECURITY PERTAINING TO SPACE COMMUNICATIONS
Simona Spassova, University of Luxembourg, Luxemburg

IAC-18.E7.5.8
THE APPLICATION OF CYBER SECURITY LAWS AND PROVISIONS TO SPACE SYSTEMS AND SERVICES
Helena Correia Mendonça, Vieira de Almeida & Associados, Portugal

IAC-18.E7.5.9
THE RELEVANCE AND APPLICABILITY OF CYBERSECURITY LAWS WITH REGARD TO DATA STORAGE ON BOARD SATELLITES AND ON THE GROUND
Dimitra Stefoudi, Leiden University, The Netherlands

IAC-18.E7.5.10
THE PRINCIPLE OF NON-HARMFUL INTERFERENCE IN CYBERSPACE AND OUTER SPACE
Yuri Takaya-Umehara, The University of TOKYO, Graduate school, Japan

IAC-18.E7.5.11
CYBER SECURITY FOR SPACE ASSETS: LEGAL PROBLEMS AND THE ROLE EXPECTED OF AFRICA
OLUSOJI NESTER JOHN, African Regional Center for Space Science and Technology Education in English (ARCSSTE-E), Nigeria

IAC-18.E7.5.12
ARTIFICIAL INTELLIGENCE AND STATE RESPONSIBILITY FOR SPACE ACTIVITY
George Anthony Long, , United States

IAC-18.E7.5.13
DEVELOPING ISSUES: THE FRAGMENTATION OF SPACE LAW
Henry Hertzfeld, Space Policy Institute, George Washington University, United States

IAC-18.E7.5.14
THE 2018 FINNISH ACT ON SPACE ACTIVITIES: ONE MORE ADDITION IN THE LIST OF NATIONAL SPACE LEGISLATION
KUMAR ABHIJEET, Institute of Air & Space Law, University of Cologne, Germany., India

IAC-18.E7.5.15
RECONSIDERING RULES OF ENGAGEMENT IN OUTER SPACE
Roy Balleste, St. Thomas University School of Law, United States

IAC-18.E7.5.16
THE MOON VILLAGE PROJECT: A LEGAL RAMIFICATION
Rada Popova, Institute of Air and Space Law, University of Cologne, Germany

IAC-18.E7.5.17
WHAT ARE SPACE RESOURCES? WHAT ARE CELESTIAL BODIES? – THE NEED FOR REFINED LEGAL DEFINITIONS IN VIEW OF RECENT REGULATORY EFFORTS CONCERNING SPACE RESOURCES
Irmgard Marboe, University of Vienna, Austria

IAC-18.E7.5.18
THE HAGUE INTERNATIONAL SPACE RESOURCES GOVERNANCE WORKING GROUP: THIRD PROGRESS REPORT
Tanja Masson-Zwaan, International Institute of Air and Space Law, Leiden University, The Netherlands

E7.6-E3.5. 33rd Joint IAA/IISL Round Table: Global Cooperation in Planetary Defence

October 4 2018, 09:45 — CCB Franzius

Co-Chair(s): *Alan Harris , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany; Yu Takeuchi , Japan Aerospace Exploration Agency (JAXA), Japan;*
Rapporteur(s): *Marc Haese , DLR, German Aerospace Center, Germany; Nicola Rohner-Willsch , Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany;*

IAC-18.E7.6-E3.5.1
PLANETARY DEFENCE OPERATIONS UNDER CURRENT INTERNATIONAL LAW
Sergio Marchisio, Italian Space Agency (ASI), Italy

IAC-18.E7.6-E3.5.2
THE WORK OF THE SMPAG AD HOC WORKING GROUP ON LEGAL ISSUES
Irmgard Marboe, University of Vienna, Austria

IAC-18.E7.6-E3.5.3
LEGAL IMPLICATION ON INTERNATIONAL RESPONSE AGAINST NEO THREAT
Masahiko Satoh, Japan Aerospace Exploration Agency (JAXA), Japan

E7.7-B3.8. Legal framework for collaborative space activities - New ways of launching (micro-launching) and large constellation microsats (Joint IAF/IISL session)

October 5 2018, 13:30 — ZARM 4

Co-Chair(s): *Philippe Clerc , Centre National d'Etudes Spatiales (CNES), France; Tony Azzarelli , Oneweb, United Kingdom;*
Rapporteur(s): *Kamlesh Brocard , Swiss Space Office (SSO), Switzerland;*

IAC-18.E7.7-B3.8.1
THE FUTURE OF THE LEGAL FRAMEWORK IN THE SPACE ACTIVITIES
J Humberto Castro Villalobos, Embajada de México, Mexico

IAC-18.E7.7-B3.8.2
"LEVIATHAN LITE" - TOWARDS A GLOBAL STEWARDSHIP ORGANIZATION FOR SPACE DOMAIN AWARENESS, CONDUCT, AND REMEDIATION
Harrison Kearby, The Ohio State University College of Engineering, United States

IAC-18.E7.7-B3.8.3
A NEW APPROACH TO NATIONAL LAWS AIMED AT ENCOURAGING SMALL SATELLITES' SPACE ACTIVITIES
Helena Correia Mendonça, Vieira de Almeida & Associados, Portugal

IAC-18.E7.7-B3.8.4
SMALL SATELLITE ACTIVITIES AND LEGAL CHALLENGES REGARDING THE STATES RESPONSIBILITY
Hamid Kazemi, Aerospace Research Institute, Ministry of Science, Research and Technology, Iran

IAC-18.E7.7-B3.8.5
THE PRINCIPLE OF NON-APPROPRIATION AND THE EXCLUSIVE USES OF LEO BY LARGE SATELLITE CONSTELLATION
Yuri Takaya-Umehara, The University of TOKYO, Graduate school, Japan

IAC-18.E7.7-B3.8.6
THE ITU SPACE REGULATION - A KEY ELEMENT TO ACCESS SPACE
Attila MATAS, , Switzerland

IAC-18.E7.7-B3.8.8
OUTER SPACE SARPS: A STEP TOWARDS HARMONIZATION OF NATIONAL REGULATIONS FOR THE ENHANCEMENT OF SUSTAINABILITY OF THE SPACE ENVIRONMENT
Gilles Doucet, Institute of Air and Space Law, McGill University, Canada

IAC-18.E7.7-B3.8.10
5 YEARS INTO THE EAR: OPPORTUNITIES FOR INTERNATIONAL COLLABORATION THROUGH EXPORT CONTROL REFORM
Mitchell Scher, Planet, United States

IAC-18.E7.7-B3.8.11
LEGAL AND POLICY PERSPECTIVES ON CIVIL-MILITARY COOPERATION FOR THE ESTABLISHMENT OF SPACE TRAFFIC MANAGEMENT
Ntorina Antoni, Eindhoven University of Technology, The Netherlands

IAC-18.E7.7-B3.8.12
FINANCING SPACE START-UPS IN THE US: LEGAL BARRIERS AND OPPORTUNITIES FOR PUBLIC AND PRIVATE FUNDS
Eytan Tepper, Institute of Air and Space Law, McGill University, Canada

IAC-18.E7.7-B3.8.13
COMMERCIAL OOS AND ITS FUTURE: POLICY AND LEGAL ISSUES BEYOND LIFE EXTENSION
Olga Stelmakh-Drescher, International Institute of Space Commerce, United States

IAC-18.E7.7-B3.8.14
REGULATORY ASPECTS IN LAUNCH SERVICE CONTRACTS FOR MICRO-SATELLITES IN COMPLIANCE WITH INTERNATIONAL LEGAL FRAMEWORK--SUCCESSFUL DOCKING IN LEGAL SPACE?
Kang Duan, China Great Wall Industry Corporation (CGWIC), China

E8. IAA MULTILINGUAL ASTRONAUTICAL TERMINOLOGY SYMPOSIUM

Coordinator(s): *Susan McKenna-Lawlor , Space Technology (Ireland) Ltd., Ireland; Tetsuo Yoshimitsu , Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan;*

E8.1. Multilingual Astronautical Terminology

October 5 2018, 09:45 — CCB Herschel

Co-Chair(s): *Susan McKenna-Lawlor , Space Technology (Ireland) Ltd., Ireland; Tetsuo Yoshimitsu , Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency, Japan;*
Rapporteur(s): *Fabrice Dennemont , International Academy of Astronautics (IAA), France;*

IAC-18.E8.1.1
TERMINOLOGICAL MONITORING PROCEDURE APPLICATION EXPERIENCE IN THE DOMAIN OF SPACE
Olexiy Shypko, , Ukraine

IAC-18.E8.1.2
FUTURE SPACE TRAVEL SYMBOLIC LANGUAGE DEVELOPED FOR NEXT GENERATION COMMUNICATION
Riya Joshi, , United States

GTS - Global Technical Symposium

GTS.1-B1.6 Citizen Science in Global Earth Observation Systems

October 4 2018, 14:45 — ÖVB 4

Co-Chair(s): *Harry A. Cikanek , National Oceanic and Atmospheric Administration (NOAA), United States; Jessica Culler , The Planetary Society, United States;*
Rapporteur(s): *Brent Smith , National Oceanic and Atmospheric Administration (NOAA), United States; Kate Becker , NOAA/ NESDIS, United States;*

IAC-18.GTS.1-B1.6.1
THE ROLE OF POLICY IN USING CITIZEN SCIENCE FOR EARTH OBSERVATION
Krystal Wilson, Secure World Foundation, United States

IAC-18.GTS.1-B1.6.2
DESIGN FOR A CITIZEN SCIENCE AND PUBLIC ENGAGEMENT PROJECT CELEBRATING ANTARCTICA AND THE SOUTHERN OCEAN
Danielle Wood, Massachusetts Institute of Technology (MIT), United States

IAC-18.GTS.1-B1.6.3
COOPERATIVE OPEN ONLINE LANDSLIDE REPOSITORY (COOLR) TO ENHANCE DISASTER RESEARCH AND PREDICTION
Caroline Juang, Earth Science Division, NASA Goddard Space Flight Center, and Science Systems and Applications Inc., United States

IAC-18.GTS.1-B1.6.4
FARMSENSE: PROVIDING AGRICULTURAL INSIGHTS USING REMOTELY SENSED DATA AND OPENSTREETMAP DATA.
Ayodele Adeyemo, Federal University of Technology Akure, Ondo state, Nigeria, Nigeria

IAC-18.GTS.1-B1.6.5
ICEKING: A PLATFORM COMBINING SUSTAINABLE TOURISM AND CITIZEN SCIENCE ON GLACIERS
Paola Belingheri, IceKing GMBH, Austria

IAC-18.GTS.1-B1.6.6
CROWDMAG: NON-TRADITIONAL OBSERVATION OF EARTH'S MAGNETIC FIELD
Manoj C. Nair, NOAA's National Centers for Environmental Information (NCEI), United State

GTS.2-B3.9. Human Spaceflight Global Technical Session

October 3 2018, 14:45 — ÖVB 4

Co-Chair(s): *Andrea Jaime , OHB System AG - Munich, Germany; Guillaume Girard , Zero2infinity, Spain;*

IAC-18. GTS.2-B3.9.1
LESSONS LEARNED FROM THE ISS ENABLING FUTURE SPACEFLIGHT COLLABORATION FOR US AND RUSSIA
Carolina Moreno Aguirre, Skolkovo Institute of Science and Technology, Russian Federation

IAC-18.GTS.2-B3.9.2
THE FREE FLYER ELEMENT OF DLR'S ORBITAL HUB CONCEPT: DESIGNED FOR SCIENCE OPPORTUNITIES AND MORE
Dominik Quantius, Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

IAC-18.GTS.2-B3.9.3
PEACE - PLANETARY EXPLORATION IN ASTRONAUTICAL CAVE ENVIRONMENTS: A FIRST HOME FOR ASTRONAUTS IN LUNAR LAVA TUBES
Bernadette Joy Detera, Space Generation Advisory Council (SGAC), The Philippines

IAC-18.GTS.2-B3.9.4
DEVELOPMENT OF A LUNAR SURFACE ARCHITECTURE AS A "PROVING GROUND" FOR FUTURE MARS MISSIONS
Abhinav Prakash, University of Houston, United States

IAC-18.GTS.2-B3.9.5
MANNED MARS MISSION RISKS EVALUATION
Guzel Kamaletdinova, Tambov State Technical University, Russian Federation

IAC-18.GTS.2-B3.9.6
BENEFITS OF A DEEP SPACE GATEWAY IN SUSTAINABLE LUNAR EXPLORATION
Matthew Duggan, The Boeing Company, United States

IAC-18.GTS.2-B3.9.7
THE ORION MPCV-ESM CONSUMABLES STORAGE SUBSYSTEM – PATH TOWARD ESM-1 MISSION
Olivier Faure, Airbus DS GmbH, Germany

IAC-18.GTS.2-B3.9.8
INTRODUCTION TO MANNED ENVIRONMENT AND SCIENTIFIC EXPERIMENTAL RESOURCES OF CHINESE SPACE STATION
Hong Yang, Institute of Manned Space System Engineering,China Academy of Space Technology (CAST), China

IAC-18.GTS.2-B3.9.9
CARGO LOADING DESIGN AND FUTURE APPLICATION OF CHINA TIANZHOU CARGO SPACECRAFT
Zhang Jian, Institute of Manned Space System Engineering,China Academy of Space Technology (CAST), China

IAC-18.GTS.2-B3.9.10
ADDRESSING KEY PSYCHOLOGICAL AND PHYSIOLOGICAL FACTORS IN PREPARATION FOR LONG DURATION MANNED MISSIONS - SUGGESTED ADAPTATION OF CURRENT ASTRONAUT TRAINING
Aline Decadi, HE Space Operations, France

IAC-18.GTS.2-B3.9.11
HUMAN FACTORS FOR SPACE
Irene Lia Schlacht, Politecnico di Milano, Italy

IAC-18.GTS.2-B3.9.12
DENTAL HEALTHCARE IN SPACE
Linda Dao, International Space University (ISU), Canada

IAC-18.GTS.2-B3.9.13
NOT JUST FUNCTIONAL, NUTRITIOUS, BUT ALSO EXPERIENTIAL: DESIGNING EATING EXPERIENCES FOR SPACE TRAVEL
Marianna Obrist, University of Sussex, United Kingdom

IAC-18.GTS.2-B3.9.14
THE CONCEPT OF AN INTEGRATED INTELLIGENT HEALTH EVALUATION AND SUPPORT PLATFORM FOR DEEP SPACE EXPLORATION
Seyed Ali Nasseri, Space Generation Advisory Council (SGAC), Canada

IAC-18.GTS.2-B3.9.15
THE AGENCY OF HUMAN-ROBOTIC LUNATICS
Sarah Jane Pell, ESA Topical Team Arts & Science, Australia

GTS.3-B2.8. Space Communications and Navigation Global Technical Session

October 2 2018, 14:45 — ÖVB 4

Co-Chair(s): *Edward W. Ashford, Graz University of Technology (TU Graz), Austria; Kevin Shortt, Germany;*
Rapporteur(s): *Stephanie Wan, Space Generation Advisory Council (SGAC), United States;*

IAC-18.GTS.3-B2.8.1
INITIAL ON-ORBIT RESULTS OF A COMMERCIAL DATA-RELAY
Justin Oliveira, Analytical Space, United States

IAC-18.GTS.3-B2.8.1
HOW IMPROVE TROPOSPHERIC DELAY ESTIMATION FROM GNSS RECEIVERS SIGNAL TO NOISE RATIO
Francesco Vespe, Agenzia Spaziale Italiana (ASI), Italy

IAC-18.GTS.3-B2.8-GTS.3.2
MATHEMATICAL MODEL TO ESTIMATE THE VENESAT-1 TRANSPONDERS ANODE VOLTAGE EVOLUTION IN ORBIT OPERATION
Carlos Burguillos, Regional Centre for Space Science and Technology Education in Asia and the Pacific (RCSSTEAP), China

IAC-18.GTS.3-B2.8.3
NOVEL BEAM STEERING APPLICATIONS FOR DRONE FSOC USING RISLEY PRISMS.
Nathaniel Shearer, The University of Adelaide, Australia

IAC-18.GTS.3-B2.8.4
LONG-TERM EVOLUTION SAFETY ANALYSIS AND DISPOSAL ORBIT DESIGN METHOD OF BDS MEO SATELLITE ORBITS
Min Hu, Equipment Academy, China

IAC-18.GTS.3-B2.8.5
REFINED COMPUTER SIMULATION OF LOSS IN QUANTUM-BASED SATELLITE CHANNEL
Andras Kiss, University of West Hungary, Hungary

IAC-18.GTS.3-B2.8.6
USING A GPS ENABLED BODY AREA NETWORK (BAN) BASED HEALTH TRACKER, THAT USES GSM, FOR MOUNTAINEERS IN NEPAL
Prabin Gyawali, Space Generation Advisory Council (SGAC), Nepal

IAC-18.GTS.3-B2.8.8
WIDE BEAMWIDTH QHA FOR RS SATELLITES AND GROUND STATION APPLICATIONS
Ahsan Rafiq, SUPARCO, Pakistan

IAC-18.GTS.3-B2.8.9 (non-confirmed)
MONOCULAR DEPTH ESTIMATION USING DEEP LEARNING FOR LUNAR LANDING
Alix LEROY, Cranfield University, United Kingdom

IAC-18.GTS.3-B2.8.11
TARGET ACQUISITION AND TRACKING OF EXTREMELY LONG DISTANCE TARGETS USING MULTIPLE RISLEY PRISM SYSTEMS
Luke Heffernan, The University of Adelaide, Australia

IAC-18.GTS.3-B2.8.12
KEY CHALLENGES IN ESTABLISHING LASER SPACE COMMUNICATION STANDARDS AND RECOMMENDATIONS OF THE SGC SPACE TECHNOLOGIES WORKING GROUP
Graham Johnson, Inmarsat Ltd., United Kingdom

GTS.4-E2.3. Student Team Competition

October 1 2018, 15:00 — ÖVB 4

Co-Chair(s): *Andrea Jaime , OHB System AG - Munich, Germany; Emmanuel Zenou, Institut Supérieur de l'Aéronautique et de l'Espace (ISAE), France;*
Rapporteur(s): *Michelle Mendes , World Space Week Association, United States;*

IAC-18.GTS.4-E2.3.1
PAPELL: FINAL STUDENT EXPERIMENT DESIGN OF A NON-MECHANICAL PUMPING SYSTEM ON THE ISS
Franziska Hild, KSat e.V., Germany

IAC-18. GTS.4-E2.3.2
MARS 10: A LANDER CAPABLE OF DELIVERING A TEN METRIC TON PAYLOAD SAFELY TO THE SURFACE OF MARS BY 2026
Pauline Delande, ISAE - Institut Supérieur de l'Aéronautique et de l'Espace, France

IAC-18.GTS.4-E2.3.3
MATRIOCHKA, ADVENTURE AND ACHIEVEMENT OF A TWO-STAGE ROCKET MADE BY FRENCH STUDENTS FROM ESTACA
Pierre GABRIELLI, ESTACA, France

IAC-18.GTS.4-E2.3.4
SPACE TUG: THE FUTURE OF LEO TO GEO TRANSPORT
Emmanuelle Aubert, ISAE - Institut Supérieur de l'Aéronautique et de l'Espace, France

IAC-18.GTS.4-E2.3.5
DROP YOUR THESIS 2018: 4.7 SECONDS OF MICROGRAVITY CONDITIONS TO ENABLE FUTURE CUBESAT LANDINGS ON ASTEROIDS
Elioenai Sitepu, Cranfield University, United Kingdom

IAC-18.GTS.4-E2.3.6
PROJECT ZEPHYRUS: AN AUTONOMOUS AND ECONOMICAL HIGH ALTITUDE TESTING SYSTEM
Hunter Hall, NASA JPL, United States

IAC-18.GTS.4-E2.3.7
BREAKING THE CANADIAN ALTITUDE RECORD: DEVELOPMENT OF A LOW-COST HYBRID SOUNDING ROCKET
Andreas Marquis, University of Toronto Aerospace Team (UTAT), Canada

IAC-18.GTS.4-E2.3.9
PERMANENT CREWED MARS BASE BY 2030 - OUTCOMES OF AN INTERDISCIPLINARY, MULTINATIONAL STUDENT WORKSHOP
Markus Guerster, Massachusetts Institute of Technology (MIT), United States

IAC-18.GTS.4-E2.3.10
DESIGN AND BUILDING OF A CUBESAT FOR RADIO TELESCOPE CALIBRATION
Harrison Handley, Simon Fraser University, Canada

IAC-18.GTS.4-E2.3.11
ARTEMIS: A COMPLETE MISSION ARCHITECTURE TO BRIDGE THE GAP BETWEEN HUMANITY AND NEAR-EARTH ASTEROIDS
Aris Golemis, Cranfield University, Greece

IAC-18.GTS.4-E2.3.12
DEVELOPMENT OF AN EXPANDABLE AIRLOCK FOR A MARTIAN SETTLEMENT
Kyle Marquis, University of British Columbia, Canada

GTS.5-B4.9. Small Satellite Missions Global Technical Session

October 5 2018, 13:30 — ÖVB 4

Co-Chair(s): *Matthias Hetscher , DLR (German Aerospace Center), Germany; Norbert Lemke , OHB System AG, Germany;*
Rapporteur(s): *Alex da Silva Curiel , Surrey Satellite Technology Ltd (SSTL), United Kingdom;*

IAC-18. GTS.5-B4.9.1
KEYNOTE: PRACTICAL DEBRIS MITIGATION MANUAL FOR DEVELOPERS OF MICROSATELLITES AND SMALLER
Darren McKnight, Integrity Applications Incorporated (IAI), United States

IAC-18.GTS.5-B4.9-GTS.5.2
THE FIRST SATELLITE ASSEMBLY, INTEGRATION AND TEST FACILITY (AIT) IN THAILAND
LIKHIT WARANON, Geo-Informatics and Space Technology Development Agency (Public Organization), Thailand

IAC-18.GTS.5-B4.9-GTS.5.3
SETEC Lab's Small Satellite Program for Environmental Monitoring
Marco Gomez Jenkins, Costa Rica Institute of Technology (ITCR), Costa Rica

IAC-18.GTS.5-B4.9.4
GALAMSAT2: FIRST GHANA SATELLITE TO MONITOR ILLEGAL MINING ACTIVITIES
Benjamin Bonsu, All Nations University, Ghana

IAC-18.GTS.5-B4.9.5
OHB SMALL SATELLITES
Norbert M.K. Lemke, OHB System AG - Munich, Germany

IAC-18. GTS.5-B4.9.6
OPERATIONAL EXPERIENCE WITH A NANOSATELLITE SCIENCE MISSION
Otto Koudelka, Graz University of Technology (TU Graz), Austria

IAC-18.GTS.5-B4.9.7
EIRSAT-1: THE EDUCATIONAL IRISH RESEARCH SATELLITE
David Murphy, University College Dublin (UCD), Ireland

IAC-18.GTS.5-B4.9.8
THE IN-ORBIT DEMONSTRATION PROGRAMME, MISSION 1 - ACCELERATING THE DEMONSTRATION OF COMMERCIAL WEATHER DATA USING SMALL SATELLITES
Graeme Taylor, Satellite Applications Catapult, United Kingdom

IAC-18.GTS.5-B4.9.9 (non-confirmed)
APPLYING A RAPID DEVELOPMENT APPROACH TO SATELLITE DEVELOPMENT ENABLING CUSTOMERS TO MEET THEIR MARKET REQUIREMENTS
Libby Hoban, Clyde Space Ltd., United Kingdom

IAC-18.GTS.5-B4.9.10
COMPARATIVE STUDY OF CLASSICAL AND FUZZY PID ATTITUDE CONTROL SYSTEM WITH EXTENDED KALMAN FILTER FEEDBACK FOR NANOSATELLITES.
Prerna Baranwal, Birla Institute of Technology and Science(BITS), India

IAC-18.GTS.5-B4.9.11
PLATINO PROJECT: A NEW ITALIAN MULTI-APPLICATION SMALL SATELLITE PLATFORM FOR HIGHLY COMPETITIVE MISSIONS.
Vincenzo Stanzione, Sitael Spa, Italy

IAC-18.GTS.5-B4.9.12
NASA'S SMALL SPACECRAFT SYSTEMS VIRTUAL INSTITUTE AND SMALL SPACECRAFT ENTERPRISE
Bruce Yost, NASA, United States

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Status as of September 2018
A = Author CA = Co-author

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ABHIJEET, KUMAR	A	IAC-18.E7.5.14
Abrahamson, Matthew	CA	IAC-18.C1.9.7
Abrahamsson, Mattias	CA	IAC-18.A2.5.9
Abrahamsson, Mattias	CA	IAC-18.D2.6.7
Abramovsky, Yevgen	CA	IAC-18.A6.IP.39
Accettura, Antonio	A	IAC-18.D1.1.3
Accettura, Antonio	A	IAC-18.D3.4.4
Acernese, Marco	A	IAC-18.A6.9.8
Acernese, Marco	CA	IAC-18.A6.IP.11
Acernese, Marco	CA	IAC-18.A6.IP.36
Acierno, Kyle	CA	IAC-18.A3.2B.4
Acierno, Kyle	A	IAC-18.A3.IP.28
Acquatella B., Paul	A	IAC-18.C1.5.12
Adachi, Masaki	CA	IAC-18.C4.3.3
Adams, Ben	A	IAC-18.D3.1.8
Adams, Ben	A	IAC-18.E3.1.1
Adams, Daniel	CA	IAC-18.D2.1.5
Adams, Daniel	A	IAC-18.B3.2.4
Adams, Daniel	A	IAC-18.D2.9-D6.2.8
Adams, Elena	CA	IAC-18.C1.9.7
Adebolu, Ibukun Oluwatobi	CA	IAC-18.B4.7.10
Adell, Phillipe	CA	IAC-18.B4.8.4
Aderholz, Manfred	CA	IAC-18.A2.7.8
Adeyemo, Ayodele	A	IAC-18.B1.6-GTS.1.4
Adriaensen, Maarten	A	IAC-18.E3.IP.3
Adrian, Astrid	A	IAC-18.A2.7.1
Adrian, Jesus	CA	IAC-18.A1.4.3
Adriani, Andrea	CA	IAC-18.C4.IP.53
Aeckerlein, Joachim	CA	IAC-18.A1.5.10
Afelli, Elena	CA	IAC-18.B3.4-B6.4.5
Afelli, Elena	CA	IAC-18.B3.7.7
Afolayan, Esther	CA	IAC-18.A1.IP.40
Agapov, Vladimir	A	IAC-18.A6.1.1
Agarwal, Deepak K.	CA	IAC-18.C4.5.9
Agarwal, Deepak K.	CA	IAC-18.C4.10.2
Agarwal, Deepak Kumar	CA	IAC-18.C4.10.6
Agbadi, Mustapha	A	IAC-18.E3.1.12
Agbaje, Ganiyu	CA	IAC-18.E1.IP.12
Agbaje, Ganiyu	CA	IAC-18.E7.5.11
Agenjo, Alfredo	A	IAC-18.C1.4.1
Ageridou, Pelagia- Ioanna	CA	IAC-18.E7.IP.18
Aggarwal, Kushagra	CA	IAC-18.D1.2.8
Aggarwal, Vishwani	A	IAC-18.D4.IP.1
Aggarwal, Vishwani	CA	IAC-18.C4.6.11
Aglietti, Guglielmo	CA	IAC-18.B4.3.5
Aglietti, Guglielmo	A	IAC-18.A6.5.1
Agrawal, Vinod Kumar	CA	IAC-18.E2.4.7
Agten, Dries	CA	IAC-18.E1.6.3
Aguado Agelet, Fernando	CA	IAC-18.B4.2.10
Aguado Agelet, Fernando	CA	IAC-18.B5.2.13
Agui, Juan	CA	IAC-18.D5.3.6
Aguilar, Roberto	CA	IAC-18.D4.2.13
Aguilar, Roberto	A	IAC-18.B5.2.2
Aguzzi, Manuela	A	IAC-18.B3.5.1
Aguzzi, Manuela	A	IAC-18.A1.IP.25
Aguzzi, Manuela	CA	IAC-18.E1.2.3
Aheieva, Kateryna	CA	IAC-18.B4.2.3
Aheieva, Kateryna	A	IAC-18.B4.7.10
Ahlendorf, Falk	CA	IAC-18.B2.IP.21
Ahmad, Imteyaz	CA	IAC-18.B2.2.6
Ahmad, Imteyaz	CA	IAC-18.B2.2.9
Ahmad, Imteyaz	CA	IAC-18.D1.2.10
Ahmad, Imteyaz	CA	IAC-18.D1.IP.14
Ahmad, Zeina	A	IAC-18.E7.IP.17
Ahmadian, Sara	A	IAC-18.A1.1.3
Ahmed, Rohaan	CA	IAC-18.A3.3A.5
Ahmed, Shakil	A	IAC-18.C3.IP.3
Ahmed, Tanveer	A	IAC-18.B4.6B.12
Ahn, Hyojung	A	IAC-18.E3.6.6
Aicher, Winfried	A	IAC-18.A2.5.7
Aida, Saika	CA	IAC-18.A6.10-C1.7.7
Ainley, Sean	CA	IAC-18.A6.5.1
Akbarzadeh, Abdolhamid	CA	IAC-18.C2.4.3
Akhmetzhanov, Ruslan	CA	IAC-18.C4.4.11
Akhtyamov, Rustam	CA	IAC-18.E1.4.3
Akinwale, Abraham	A	IAC-18.B1.IP.15
Akinyede, Joseph	CA	IAC-18.B4.1.7
Akita, Takeshi	A	IAC-18.C2.5.5
Akiyama, Kyohei	CA	IAC-18.C1.8.1
Akiyama, Yuki	A	IAC-18.C1.1.9
Akiyama, Yuki	CA	IAC-18.C1.4.4
Akniyazov, Chingiz	CA	IAC-18.A6.4.9
Akturan, Riza	A	IAC-18.B2.2.5
Al Hameli, Fatema	A	IAC-18.E1.IP.14
Al Hashmi, Khaled	A	IAC-18.A3.1.2
Al Hashmi, Khaled	A	IAC-18.D3.4.3
Al Husseini, Abdul Mohsen Z.	CA	IAC-18.B2.8-GTS.3.1
Al Khateeb, Ashraf	CA	IAC-18.C1.1.7
Al Maskari, Sheikha	A	IAC-18.E1.1.6
Al Romaithi, Maitha	A	IAC-18.E1.5.6
Al Shareji, Fatheya	A	IAC-18.A6.IP.44
Al-Ekabi, Cenan	CA	IAC-18.E6.2.3
Alam, Sabrina	A	IAC-18.A7.2.9
Alam, Sabrina	CA	IAC-18.B2.3.8
Alam, Sabrina	CA	IAC-18.E5.4.9
Alarcon, Raul	A	IAC-18.B5.1.11
Alary, Didier	A	IAC-18.E3.4.10
Alary, Didier	CA	IAC-18.E6.3.7
Albano, Marta	CA	IAC-18.C2.IP.19
Albano, Marta	CA	IAC-18.C2.8.1
Albert, Yann	CA	IAC-18.D1.1.1
Albini, Giuseppe	CA	IAC-18.C1.IP.29
Albino, Vito	CA	IAC-18.D6.3.4
Alblooshi, Heyam	A	IAC-18.A3.3A.9
Albu-Schäffer, Alin	CA	IAC-18.D1.1.9
Albu-Schäffer, Alin Olimpiu	CA	IAC-18.A3.2A.8
Alcalde Barahona, Aída	CA	IAC-18.D1.3.1
Alcalde Barahona, Aída	A	IAC-18.A3.4A.7
Alcaraz, Julian	CA	IAC-18.E2.3-GTS.4.2
Alcibiade, Alessandro	CA	IAC-18.B3.9-GTS.2.11

Alcibiade, Alessandro	CA	IAC-18.A3.IP.69
Alderson, Rob	A	IAC-18.E1.9.13
Aleksandrov, Oleg	A	IAC-18.A1.IP.9
Aleksandrov, Oleg	A	IAC-18.A3.IP.61
Aleksandrov, Oleg	A	IAC-18.B2.IP.2
Aleksandrov, Oleg	A	IAC-18.D4.IP.7
Aleksandrov, Oleg	A	IAC-18.E6.IP.3
Aleksey, Moskovcev	CA	IAC-18.A1.8.18
Alessi, Elisa Maria	CA	IAC-18.C1.1.4
Alessi, Elisa Maria	CA	IAC-18.A6.4.6
Alessi, Elisa Maria	A	IAC-18.A6.10-C1.7.11
Alexander, Reginald	CA	IAC-18.D1.4A.6
Alexander, Sasha	A	IAC-18.E1.7.12
Alfano, David	CA	IAC-18.B3.6-A5.3.3
Alfuhaid, Sulieman	CA	IAC-18.D2.IP.15
Alger, Mike	A	IAC-18.C1.IP.21
Ali, Zehra	CA	IAC-18.B2.3.10
Ali-Fadiora, Lami	CA	IAC-18.E1.IP.12
Ali-Fadiora, Lami	CA	IAC-18.E7.5.11
Aliberti, Marco	CA	IAC-18.B4.5.4
Alicalapa, Frederic	CA	IAC-18.C3.2.9
Alifanov, Oleg	A	IAC-18.C2.4.10
Alifanov, Oleg	A	IAC-18.C2.7.9
Alifanov, Oleg	CA	IAC-18.C2.8.6
Allam, Jeremy	CA	IAC-18.D1.5.8
Allasio, Andrea	CA	IAC-18.A3.3A.3
Allegranza, Claudia	CA	IAC-18.C2.8.7
Allen, Samantha	A	IAC-18.A6.3.4
Allen, Zachary	CA	IAC-18.D2.8-A5.4.4
Allouis, Elie	CA	IAC-18.D1.IP.27
AlMaeeni, Sara	A	IAC-18.B2.1.6
AlMahmoud, Muthanna	A	IAC-18.A7.1.5
Almeida Prado, Antonio Fernando Bertachini	CA	IAC-18.A3.IP.57
Almeida Prado, Antonio Fernando Bertachini	A	IAC-18.D4.4.11
AlMheiri, Read	A	IAC-18.D5.3.11
Alonso, Gustavo	CA	IAC-18.C2.1.5
Alotaibi, Ghanim	A	IAC-18.A3.IP.49
Alouani, Antoine	CA	IAC-18.C2.1.11
Alrashedi, Naser	A	IAC-18.E3.4.14
ALTAF, UMAIR	CA	IAC-18.C3.IP.11
Althapp, Sebastian	CA	IAC-18.A3.4B.1
Altieri, Francesca	CA	IAC-18.A3.1.12
Altun, Altan Alpay	CA	IAC-18.C4.5.3
Alvarado Briceño, Carlos	CA	IAC-18.B4.1.4
Alvarado Briceño, Carlos	A	IAC-18.E3.3.8
Alvarado Briceño, Carlos	A	IAC-18.E5.5.8
Alvarado Briceño, Carlos	CA	IAC-18.E1.1.3
Alvarenga dos Santos, Marcia	A	IAC-18.E3.4.12
Alvarez, Pedro Mateo	CA	IAC-18.E1.8.3
Alvarez Pinzón, Laura Carolina	CA	IAC-18.E5.1.12
Amadio, Diego	CA	IAC-18.B4.1.8
Amador Bedolla, Carlos	CA	IAC-18.C3.3.8
Amador Bedolla, Carlos	CA	IAC-18.C2.6.12
Amaldi, Andrea	CA	IAC-18.C2.1.11
Amara, Mohamed	A	IAC-18.E7.IP.23
Amaya-Vargas, Juan	CA	IAC-18.E1.IP.30
Amend, Oliver	CA	IAC-18.A2.6.1
Amend DG6BCE, Oliver	A	IAC-18.E1.1.12
Amin, Muhammad	CA	IAC-18.B2.8-GTS.3.8
Amjad, Adeel	A	IAC-18.C3.IP.11
Amorastreya, Adam Apollo	A	IAC-18.E1.IP.30
Amoroso, Marilena	CA	IAC-18.A3.5.4
Amoruso, Leonardo	CA	IAC-18.A6.1.8
Amoruso, Leonardo	CA	IAC-18.B6.3.9
Amoruso, Leonardo	A	IAC-18.A7.3.1
Amoruso, Leonardo	CA	IAC-18.B6.1.6
Amponsah, Samuel	CA	IAC-18.E1.4.13
AMROUCHI, Hinda	CA	IAC-18.D2.5.3
Amselem, Shimon	CA	IAC-18.A2.7.4
Anand, Ujjwal	CA	IAC-18.D1.2.8
Anandito, Akhsanto	CA	IAC-18.E2.3-GTS.4.9
Anastasiou, Peter	CA	IAC-18.B4.2.5
Anatoly, Shapovalov	CA	IAC-18.E2.4.8
Ancona, Elena	A	IAC-18.A7.2.5
Ancona, Elena	CA	IAC-18.B4.8.16
Anderl, Reiner	CA	IAC-18.D1.1.9
Anderson, Allison	CA	IAC-18.A1.2.28
Andersson, Laila	CA	IAC-18.B4.2.9
Andiappane, Sabrina	A	IAC-18.D3.3.3
Ando, Shigemasa	A	IAC-18.B1.3.2
Andrade, Jonathan	A	IAC-18.E7.IP.14
Andrea, Christina-Sylvia	CA	IAC-18.A1.1.6
Andreas, Dömel	CA	IAC-18.A3.2A.8
Andrenucci, Mariano	CA	IAC-18.C4.4.8
Andretta, Maria Giulia	A	IAC-18.E4.3B.13
Andreussi, Tommaso	A	IAC-18.C4.4.8
Andreussi, Tommaso	CA	IAC-18.C4.6.6
Andreussi, Tommaso	CA	IAC-18.D2.8-A5.4.7
Andrews, Shaun	A	IAC-18.E2.2.10
Andrianov, Artem	A	IAC-18.C4.2.9
Andrijasevic, Djordje	A	IAC-18.E3.2.6
Angeletti, Federica	A	IAC-18.C2.3.9
Angeletti, Federica	CA	IAC-18.E5.5.3
Angelo, Mario	CA	IAC-18.C2.9.9
Angerer, Oliver	CA	IAC-18.A3.2B.10
Angerer, Oliver	CA	IAC-18.A1.7.4
Angerer, Oliver	CA	IAC-18.A1.7.6
Anilchandra Bhat, Umesh	A	IAC-18.B6.IP.4
Ankersen, Finn	CA	IAC-18.D1.3.1
Ankersen, Finn	CA	IAC-18.D1.6.10
Anma, Kenichi	CA	IAC-18.C3.2.8
Ansbro, Eamonn	A	IAC-18.A4.IP.5
Anselmi, Laura	CA	IAC-18.A3.5.4
Anselmo, Luciano	CA	IAC-18.C1.1.12
Anselmo, Luciano	CA	IAC-18.A6.7.7
Antara, Raihana Shams Islam	A	IAC-18.E1.5.13
Antara, Raihana Shams Islam	CA	IAC-18.B1.IP.26
Anthony, Niklas	A	IAC-18.A3.IP.65
Anton, Oliver	CA	IAC-18.A2.1.8
Anton, Wilma	CA	IAC-18.E3.6.2
Antonetti, Stefano	CA	IAC-18.D4.2.12
Antoni, Ntorina	CA	IAC-18.E3.IP.3
Antoni, Ntorina	CA	IAC-18.D2.9-D6.2.5
Antoni, Ntorina	A	IAC-18.E7.7-B3.8.11
Antonietti, Nicolo	CA	IAC-18.A4.1.9
Antonietti, Nicolò	A	IAC-18.A4.1.11
Antonio, Andrew	A	IAC-18.B1.IP.24
Antoniou, Michail	CA	IAC-18.B1.3.10
Antropova, Evgenya	CA	IAC-18.A1.4.14
Antwiwaa, Anita	CA	IAC-18.E1.1.11
Anuradha, T.K.	CA	IAC-18.B2.2.6
Anuradha, T.K.	CA	IAC-18.B2.2.9
Anuradha, T.K.	CA	IAC-18.D1.2.10
Anuradha, T.K.	CA	IAC-18.D1.IP.14
Anuradha, T.K.	CA	IAC-18.B6.2.9
Aoki, Setsuko	A	IAC-18.E7.5.3
Aoki, Yoshio	CA	IAC-18.D4.3.15
Aoki, Yoshio	CA	IAC-18.D4.3.16
AOUF, NABIL	CA	IAC-18.B2.IP.20
AOUF, NABIL	CA	IAC-18.C1.IP.3
AOUF, NABIL	CA	IAC-18.C1.IP.20
Aoyama, Tomoki	CA	IAC-18.A1.2.17
Apathy, Istvan	CA	IAC-18.A1.5.11
Apel, Uwe	CA	IAC-18.D3.2.10
Apel, Uwe	A	IAC-18.C4.IP.1
Apland, Clint	CA	IAC-18.A3.4B.8
Appel, Nicolas	CA	IAC-18.B2.2.2
Aprea, Julio	A	IAC-18.D2.1.1
Aprea, Julio	A	IAC-18.E3.2.4
Aprea, Julio	A	IAC-18.B4.5.5
Arai, Hiroyuki	A	IAC-18.C4.7-C3.5.11
ARAI, MAKOTO	A	IAC-18.E1.9.5
Arakawa, Ryohei	CA	IAC-18.C4.2.7
Arantes Silva, Claudia	CA	IAC-18.B1.5.8
Arbeille, Philippe	CA	IAC-18.A1.IP.25
Arcellana-Panlilio, Mayi	CA	IAC-18.D1.1.6
Archambault-Leger, Veronique	CA	IAC-18.A1.2.28
Arciaga, Meghan	CA	IAC-18.B2.1.5
Ardaens, Jean-Sébastien	A	IAC-18.D1.2.3
Areshkina, Larysa	A	IAC-18.B5.1.5
Aresu, Giambattista	CA	IAC-18.A4.1.9
Aretz, Zita	CA	IAC-18.A1.4.16
Arifin, Bustanul	A	IAC-18.C2.IP.24
Arita, Shoko	CA	IAC-18.D4.3.10
Arkless Gray, Kate	A	IAC-18.E3.2.8
Arkless Gray, Kate	A	IAC-18.E1.9.1
Arm, Philip	A	IAC-18.D3.3.10
Armbrecht, Gabriele	CA	IAC-18.A1.2.25
Armbrecht, Gabriele	CA	IAC-18.A1.4.2
Armbrecht, Gabriele	A	IAC-18.A1.4.8
Armbrecht, Gabriele	CA	IAC-18.A1.4.10
Armbrecht, Gabriele	CA	IAC-18.A1.4.15
Armellin, Roberto	CA	IAC-18.C1.2.9
Armellin, Roberto	CA	IAC-18.A6.5.2
Armellin, Roberto	CA	IAC-18.C1.9.13
Armstead, James	CA	IAC-18.E7.4.1
Arnhof, Marlies	A	IAC-18.E1.4.10
Arnhof, Marlies	CA	IAC-18.A5.2.15
Arnhof, Marlies	CA	IAC-18.A5.1.14
Arnocz, Istvan	CA	IAC-18.E1.IP.3
Aronne, Giovanna	A	IAC-18.E1.3.6
Aronne, Giovanna	CA	IAC-18.A1.7.16
Arora, Aman	A	IAC-18.A5.2.14
Arora, Aman	A	IAC-18.A3.IP.12
ARORA, NITIN	CA	IAC-18.C1.8.12
Arquilla, Katya	CA	IAC-18.E2.3-GTS.4.9
Arrigo, Gabriella	CA	IAC-18.E3.1.7
Artemyev, Oleg	CA	IAC-18.E1.7.5
Arthurs, Richard	CA	IAC-18.E2.3-GTS.4.10
Artono, Endro	CA	IAC-18.B1.1.13
Artuso, Giovanni	CA	IAC-18.D4.1.8
Artuso, Giovanni	CA	IAC-18.A5.1.5
Artuso, Giovanni	A	IAC-18.D2.8-A5.4.6
Artuso, Giovanni	CA	IAC-18.B4.7.9
Arunan, Sinnappoo	CA	IAC-18.B3.IP.14
Arzelier, Denis	CA	IAC-18.C1.IP.32
Asakawa, Jun	A	IAC-18.C4.8-B4.5A.3
Asfour, Tamim	CA	IAC-18.A3.2A.8
Ashcroft, Clifford	CA	IAC-18.C2.2.9
Ashknani, Naser	A	IAC-18.D2.IP.15
Ashrafi, Behnam	CA	IAC-18.C2.4.3
Aslan, Kubatiev	CA	IAC-18.A1.8.18
Aslan, Sinan Alp	CA	IAC-18.E2.3-GTS.4.1
Aslanov, Vladimir S.	A	IAC-18.C1.3.9
Aslanov, Vladimir S.	A	IAC-18.A6.IP.31
Aslanov, Vladimir S.	A	IAC-18.C1.IP.15
Aslanov, Vladimir S.	A	IAC-18.D4.4.9
Aso, Shigeru	A	IAC-18.C4.2.7
Aso, Shigeru	A	IAC-18.D2.5.5
Asraff, A.K.	A	IAC-18.C4.IP.24
Atasever, Tuva	A	IAC-18.D3.1.3
Atasever, Tuva	A	IAC-18.E1.4.2
Ataş, Ömer	CA	IAC-18.E1.4.9
Atchison, Justin	A	IAC-18.A3.4B.8
Atchison, Justin	A	IAC-18.C1.9.7
Atencio, Phillip	A	IAC-18.C2.IP.11
Atkinson, George	CA	IAC-18.B1.3.10
Atreya, Sushil	A	IAC-18.A3.5.6
Attara, Sanjay	CA	IAC-18.B4.7.12
Atzrodt, Heiko	CA	IAC-18.C2.5.13
Aubert, Emmanuelle	A	IAC-18.E2.3-GTS.4.4
Auburn, John	CA	IAC-18.A6.8.6
auf der Heide, Kolja	CA	IAC-18.D3.4.4
Augelli, Mauro	A	IAC-18.B3.4-B6.4.9
Autino, Adriano	A	IAC-18.D4.2.12
Avanzini, Giulio	A	IAC-18.C1.3.4
Avanzini, Giulio	A	IAC-18.C1.4.5
Avendano, Martin E.	CA	IAC-18.C1.8.3
Averesch, Nils	CA	IAC-18.D3.2.4
Averesch, Nils	CA	IAC-18.A2.7.12
Avila, Marc	CA	IAC-18.A2.5.1
Avila, Marc	CA	IAC-18.C2.8.11
Avramenko, Aleksandr	CA	IAC-18.C1.3.9
Avsar, Cem	CA	IAC-18.E1.4.4
Ayala-Hernández, Felipe	CA	IAC-18.B2.4.5
Ayu Pradanawati, Sylvia	CA	IAC-18.C2.IP.25
Ayuso, Antonio	CA	IAC-18.D2.5.2
Azahari, Nur Amirah	CA	IAC-18.B5.1.10

B

Name	Role	Paper
Ba, Yan	A	IAC-18.C4.9.13
Baatout, Sarah	CA	IAC-18.A1.8.8
BABAGANA, ABUBAKAR	A	IAC-18.E5.2.8
Babb, Ryan	A	IAC-18.D6.1.4
Baberwal, Sonal	A	IAC-18.B3.IP.11
Babić, Ljubiša	CA	IAC-18.A3.4B.4
Bacchi, Stephen	CA	IAC-18.E1.4.7
Bach, Christian	A	IAC-18.C4.5.16
Bach, Christian	CA	IAC-18.C4.10.4
Bach, Jan Marius	A	IAC-18.B3.4-B6.4.3
Bach, Jan Marius	CA	IAC-18.B3.4-B6.4.4
Bachelet, Charles-Hubert	A	IAC-18.C4.1.16
Bacsardi, Laszlo	CA	IAC-18.E1.6.6
Bacsardi, Laszlo	CA	IAC-18.B2.8-GTS.3.5
Baerwalde, Sven	CA	IAC-18.B3.9-GTS.2.2
Baevsky, Roman	CA	IAC-18.A1.2.1
Baevsky, Roman	CA	IAC-18.A1.2.2
Baevsky, Roman	CA	IAC-18.A1.2.3
Baevsky, Roman	CA	IAC-18.A1.2.4
Bagatin, Marta	CA	IAC-18.A6.3.7
Baghban Kondori, Maryam	CA	IAC-18.C3.1.9
Baghchehsara, Ali	A	IAC-18.B6.2.5
Baglioni, Pietro	CA	IAC-18.A3.3A.3
Bagrov, Alexander	A	IAC-18.C4.6.7
Bahov, Bozhidar	A	IAC-18.D4.5.3
Bai, Liangyu	A	IAC-18.C3.2.2
Bai, Xiaoli	CA	IAC-18.A6.7.3
Bai, Xueliang	CA	IAC-18.D5.4.4
Bai, Yuzhu	CA	IAC-18.B4.6A.2
Bailey, Morgan	A	IAC-18.D2.7.3
Baize, Lionel	CA	IAC-18.A3.1.1
Baker, Adam	A	IAC-18.D6.1.2
Baker, Adam	A	IAC-18.E1.5.10
Baker, Adam	CA	IAC-18.B6.1.4
Baker, David	A	IAC-18.E4.3B.7
Baker, John	CA	IAC-18.B4.2.7
Baker, John	CA	IAC-18.B4.8.4
Baker, Mark	CA	IAC-18.C3.4.5
BakhtiariMojaz, Sahar	CA	IAC-18.E6.3.1
Bakhtigaraev, Nail	CA	IAC-18.A6.IP.43
Bakke, Kari Anne Hestnes	CA	IAC-18.B3.7.4
Balachandran, Ribin	CA	IAC-18.D1.1.9
Balagurin, Oleksii	CA	IAC-18.B4.3.13
Balan, Sudeesh	A	IAC-18.D1.IP.10
Balasubramaniam, Rajeswari	A	IAC-18.B4.4.10
Baldesi, Gianluigi	A	IAC-18.D5.2.1
Baldesi, Gianluigi	A	IAC-18.B5.3.11
Baldini, Francesca	A	IAC-18.C1.6.11
Balint, Tibor	A	IAC-18.E5.3.3
Balint, Tibor	CA	IAC-18.E5.IP.7
Balke, Alexander	CA	IAC-18.B2.6.6
Balleste, Roy	A	IAC-18.E7.5.15
Ballheimer, Walter	CA	IAC-18.D1.IP.17
Ballheimer, Walter	A	IAC-18.D5.3.7
Ballouz, Ronald-Louis	CA	IAC-18.C1.2.6
Balme, Matthew	CA	IAC-18.A3.1.12
Balogh, Werner R.	A	IAC-18.B4.1.1
Bals, Johann	CA	IAC-18.D1.4B.1
Balsamo, Michele	CA	IAC-18.A1.6.5
Baltazar Garduño, Ana Cristina	CA	IAC-18.B2.3.8
Baltazar Garduño, Ana Cristina	CA	IAC-18.B2.6.3
Balugin, Nikolai	CA	IAC-18.E1.IP.20
Bambach, Patrick	A	IAC-18.A7.3.3
Bambach, Patrick	A	IAC-18.B4.8.9
Bamidis, Panagiotis	CA	IAC-18.A1.3.11
Bamidis, Panagiotis	CA	IAC-18.A1.3.12

Bamidis, Panagiotis	CA	IAC-18.A1.3.13
Bamidis, Panagiotis	CA	IAC-18.A1.3.14
Bamsey, Matthew	CA	IAC-18.A1.IP.4
Bandini, Flavio	CA	IAC-18.D2.4.8
Bandla, Sirisha	A	IAC-18.B3.2.12
Bandla, Sirisha	A	IAC-18.D2.7.4
Bando, Mai	CA	IAC-18.C1.1.9
Bando, Mai	CA	IAC-18.C1.4.4
Bando, Mai	CA	IAC-18.C1.6.5
Banerdt, William Bruce	CA	IAC-18.A3.3A.1
Bang, Hyochoong	CA	IAC-18.C1.6.7
Bang, Hyochoong	CA	IAC-18.C1.IP.18
Bangert, Philip	A	IAC-18.C4.8-B4.5A.4
Bank, Cristian	CA	IAC-18.B1.2.2
Bannova, Olga	A	IAC-18.D4.1.7
Bannova, Olga	A	IAC-18.E1.8.3
Bannova, Olga	CA	IAC-18.E1.7.12
Bao, Qilin	CA	IAC-18.C4.5.13
Bao, Wen	CA	IAC-18.C4.IP.7
BaoSen, Du	CA	IAC-18.A6.6.9
Baoyin, Hexi	CA	IAC-18.C1.8.4
Baptista, Aurora	CA	IAC-18.C2.9.9
Baptista Rosas, Raul C.	A	IAC-18.A1.IP.38
Baqué, Mickael	CA	IAC-18.A3.2C.8
Baranov, Mikhail	CA	IAC-18.A1.2.12
Baranov, Victor	A	IAC-18.A1.2.12
Baranwal, Prerna	A	IAC-18.B4.9-GTS.5.10
Barat, Itziar	A	IAC-18.B1.1.9
Barat, Itziar	A	IAC-18.C1.IP.25
Barber, Simeon	CA	IAC-18.A3.2B.2
Barbera, Daniele	CA	IAC-18.A5.1.6
Barbieri, Edoardo	CA	IAC-18.E6.1.9
Baresi, Nicola	CA	IAC-18.C1.2.6
Baresi, Nicola	A	IAC-18.C1.9.4
Barker, Sean	CA	IAC-18.B2.7.2
Barmin, Igor	A	IAC-18.D5.1.1
Barna, Jenny	A	IAC-18.B4.5.11
Barnard, Ansley	CA	IAC-18.C3.4.7
Barnes, David G.	CA	IAC-18.E5.IP.5
Barnhard, Gary	A	IAC-18.C3.2.4
Barnhart, David	CA	IAC-18.D2.6.2
Barnhart, David	A	IAC-18.D1.5.8
Barreiro, Filipe	CA	IAC-18.C4.IP.33
Barrentine, Emily	CA	IAC-18.A7.3.8
Barrera, Marco	CA	IAC-18.B6.3.5
Barrera, Marco	CA	IAC-18.B6.3.6
Barrett, Michael	CA	IAC-18.B3.1.8
Barrios, Elizabeth	A	IAC-18.C2.8.2
Barrueta Flores, Nancy Cihuapilli	CA	IAC-18.C3.3.8
Barrueta Flores, Nancy Cihuapilli	CA	IAC-18.C2.6.12
Barschke, Merlin F.	CA	IAC-18.B5.1.13
Barschke, Merlin F.	A	IAC-18.B4.3.1
Barschke, Merlin F.	A	IAC-18.B4.6A.4
Barschke, Merlin F.	CA	IAC-18.B4.7.3
Barthelmes, Stefan	CA	IAC-18.D1.4B.1
Bartholomäus, Julian	A	IAC-18.B5.1.13
Bartkowiak, Bartosz	CA	IAC-18.C4.3.12
Bartolini, Alana	A	IAC-18.E1.1.10
Barton, Patrick	CA	IAC-18.D3.3.10
Bartosch, Wolfgang	CA	IAC-18.A2.3.5
Bartov, Maya	CA	IAC-18.D5.IP.2
Bartsch, Sebastian	CA	IAC-18.D4.1.3
Bartsch, Sebastian	CA	IAC-18.D3.2.12
Bartsch, Sebastian	CA	IAC-18.D3.IP.2
Bartsch, Sebastian	CA	IAC-18.D1.6.5
Bartylak, Maciej	A	IAC-18.E1.3.9
Baskcomb, Stuart	A	IAC-18.D6.1.7
Basner, Mathias	CA	IAC-18.A1.1.7
Basner, Mathias	CA	IAC-18.A1.2.13
Basner, Mathias	CA	IAC-18.A1.4.10
Basner, Mathias	CA	IAC-18.A1.4.19
Bassetto, Marco	A	IAC-18.C1.4.8
Bast, Dan	A	IAC-18.A6.7.2
Bastante, Juan Carlos	CA	IAC-18.C1.3.7
Basti, Alireza	CA	IAC-18.A1.4.16
Bastida Virgili, Benjamin	CA	IAC-18.A6.2.8
Bastida Virgili, Benjamin	CA	IAC-18.A6.2.10
Basu, Prateep	A	IAC-18.B5.2.11
Batchu, Divya	CA	IAC-18.B1.5.6
Bates, Shelby	CA	IAC-18.B3.4-B6.4.6
Bates, Warren	CA	IAC-18.B3.3.1
Bathmann, Martin	CA	IAC-18.B1.5.3
Batista Negri, Rodolfo	A	IAC-18.E2.1.2
Batonneau, Yann	CA	IAC-18.C4.5.3
Batta, Karabee	CA	IAC-18.B4.9-GTS.5.10
Battagliere, Maria Libera	A	IAC-18.B1.1.11
Battagliere, Maria Libera	CA	IAC-18.D1.3.3
Battagliere, Maria Libera	CA	IAC-18.B1.5.12
Battagliere, Maria Libera	A	IAC-18.E5.5.3
Battaglione, Ezio	CA	IAC-18.C2.IP.19
Battaglione, Ezio	CA	IAC-18.C2.8.1
Battilana, Matteo	CA	IAC-18.B1.IP.9
Battista, Francesco	A	IAC-18.C4.4.14
Battista, Francesco	A	IAC-18.C4.5.7
Battistini, Simone	CA	IAC-18.C2.3.8
Batura, Olga	CA	IAC-18.A6.8.2
Baturkin, Volodymyr	CA	IAC-18.C2.1.7
Bauer, Frank	CA	IAC-18.B2.5.5
Bauer, Johann	CA	IAC-18.A1.8.7
Bauer, Johann	CA	IAC-18.A1.8.8
Bauer, Johann	CA	IAC-18.A1.8.9
Bauer, Johann	CA	IAC-18.A2.7.11
Bauer, Philipp	A	IAC-18.C4.IP.28
Bauer, Waldemar	CA	IAC-18.D2.6.1
Bauer, Waldemar	CA	IAC-18.A3.4B.6
Baumann, Frank	CA	IAC-18.C2.6.9
Baumann, Frank	A	IAC-18.B4.6B.14
Baumann, Ingo	A	IAC-18.E7.3.3
Baumann, Peter	A	IAC-18.B1.4.4
Baumann, Peter	A	IAC-18.B4.7.1
Baumann, Tom	CA	IAC-18.B4.3.13
Baumstark-Khan, Christa	A	IAC-18.A1.5.7
Baur, Carsten	CA	IAC-18.C3.4.4
Bawamia, Ahmad	CA	IAC-18.A2.1.9
Bay, Kristian	CA	IAC-18.B4.2.2
Bay, Kristian	CA	IAC-18.C4.6.4
Bazaldua Morquecho, Danton Iván	CA	IAC-18.D3.1.6
Bazzi, Wael	A	IAC-18.E5.5.7
Baños García, Adrián	CA	IAC-18.A7.2.6
Beattie, Alexander	CA	IAC-18.B4.4.2
Beauchet, Romain	CA	IAC-18.C4.5.3
Beaudry, Simon	A	IAC-18.A1.IP.8
Beauregard, Chris	A	IAC-18.E3.4.15
Beauregard, Chris	A	IAC-18.E1.7.13
Beblo-Vranesevic, Kristina	CA	IAC-18.A1.6.1
Becatti, Giulia	CA	IAC-18.C4.4.8
Becedas, Jonathan	CA	IAC-18.C4.6.4
Becedas Rodríguez, Jonathan	CA	IAC-18.B4.2.2
Becedas Rodríguez, Jonathan	CA	IAC-18.A6.4.6
Bechasnov, Pavel	CA	IAC-18.B3.5.4
Beck, James	A	IAC-18.A6.2.5
Beck, James	CA	IAC-18.A6.4.6
Beck, Peter	CA	IAC-18.D2.7.3
Beck, Peter	A	IAC-18.B4.5.1
Becker, Dennis	CA	IAC-18.A2.3.5
Becker, Marcel	A	IAC-18.A6.6.8
Becker, Michael	CA	IAC-18.E1.IP.27
Becklake, John	A	IAC-18.E4.2.3
Bedington, Robert	A	IAC-18.D5.4.4
Bednar, Danny	A	IAC-18.E5.4.3
Beglinger, Lars	CA	IAC-18.D3.3.10
Beglov, Rushan	CA	IAC-18.A5.1.11
Behnke, Alexander	CA	IAC-18.E2.3-GTS.4.1
Behrmann, Christopher	CA	IAC-18.E2.3-GTS.4.1
Beischl, Christoph	A	IAC-18.E3.1.6
Beisser, Kerri	A	IAC-18.E1.6.9
Bejar-Romero, Juan Antonio	CA	IAC-18.A7.3.2
Belakovskiy, Mark	CA	IAC-18.B3.2.5
Belakovsky, Mark	CA	IAC-18.A1.3.9
Belakovsky, Mark	CA	IAC-18.A1.4.1
Belavy, Daniel	CA	IAC-18.A1.2.25
Belavy, Daniel	A	IAC-18.A1.4.2
Belavy, Daniel	CA	IAC-18.A1.4.8
Belavy, Daniel	CA	IAC-18.A1.4.10
Belavy, Daniel	CA	IAC-18.A1.4.15
Beldavs, Vidvuds	A	IAC-18.D3.1.5
Belikov, Vladimir	CA	IAC-18.A6.2.1
Belikov, Vladimir	CA	IAC-18.B2.3.6
Belingheri, Paola	A	IAC-18.E1.5.15
Belingheri, Paola	A	IAC-18.B1.6-GTS.1.5
Belkouchi, Badia	CA	IAC-18.B4.2.2
Belkouchi, Badia	CA	IAC-18.C4.6.4
Bell, David	CA	IAC-18.B2.1.5
Bell, Deanne	CA	IAC-18.E1.7.1
Bell, Suzanne	CA	IAC-18.A1.1.4
Bellardo, John	CA	IAC-18.B4.5.14
Bellardo, John	CA	IAC-18.D2.IP.12
Bellomo, Nicolas	CA	IAC-18.C4.8-B4.5A.2
Belokonov, Igor V.	CA	IAC-18.B6.3.11
Belozerskii, Leonid	CA	IAC-18.B5.1.5
Beltrame, Giovanni	CA	IAC-18.B4.3.11
Beltrame, Giovanni	CA	IAC-18.A1.IP.8
Beltrame, Giovanni	CA	IAC-18.B3.6-A5.3.9
Belz, Stefan	CA	IAC-18.A1.7.4
Belz, Stefan	CA	IAC-18.A1.7.6
Ben-Horin, Oded	CA	IAC-18.E1.9.2
Benecken, Ian	CA	IAC-18.B3.9-GTS.2.10
Benhadj, Iskander	CA	IAC-18.B4.4.7
Bennani, Samir	CA	IAC-18.C1.5.3
Bennet, Francis	CA	IAC-18.A6.6.3
Bennett, Nick	CA	IAC-18.A3.IP.5
Benninghoff, Heike	CA	IAC-18.B4.6A.8
Bense, Nicholas	A	IAC-18.D4.1.1
Benson, Conor	A	IAC-18.A6.10-C1.7.1
Bensoussan, Denis	CA	IAC-18.A6.6.4
Bentes, Carlos	CA	IAC-18.B1.IP.19
Benvenuto, Eugenio	CA	IAC-18.A1.6.9
Benvenuto, Riccardo	CA	IAC-18.D1.IP.1
Benyoucef, Yacine	CA	IAC-18.A3.IP.69
Bera, Namrata	CA	IAC-18.C3.1.3
Bera, Namrata	CA	IAC-18.A4.2.11
Berberoğlu, Sergün	CA	IAC-18.E1.IP.24
Berg, Marco	A	IAC-18.D2.4.7
Berg, Marco	CA	IAC-18.D3.3.7
Berg, Marco	CA	IAC-18.A1.IP.17
Berg, Marco	A	IAC-18.A2.6.1
Berg, Marco	CA	IAC-18.C2.9.9
Bergamasco, Alessandro	CA	IAC-18.B3.6-A5.3.3
Bergamasco, Federico	CA	IAC-18.E7.5.7
Bergamini, Elisabetta	CA	IAC-18.E3.3.4
Bergamini, Elisabetta	CA	IAC-18.E5.2.1
Berger, Michael	CA	IAC-18.B1.1.1
Berger, Thomas	CA	IAC-18.A1.5.10
Bergé, Joël	CA	IAC-18.A2.1.1
Bering, Edgar	A	IAC-18.B4.2.9
Berinstain, Alain	A	IAC-18.A3.1.8
Berinstain, Alain	A	IAC-18.B4.8.7
Berman, Simmie	CA	IAC-18.D1.4B.4
Bernal, Cesar	CA	IAC-18.A6.5.1
Bernard, Robert	CA	IAC-18.D4.4.13
Bernard, Robert	CA	IAC-18.D4.4.14
Bernardini, Fabrizio	CA	IAC-18.D3.3.1
Bernasconi, Marco C	CA	IAC-18.D4.2.7
Bernasconi, Marco C	A	IAC-18.E5.IP.9
Bernhardt, Knut	CA	IAC-18.B1.4.7
Bernving, Niels	CA	IAC-18.D2.7.6
Berquand, Audrey	A	IAC-18.D5.2.5
Berquand, Audrey	CA	IAC-18.B3.9-GTS.2.10
BERTACHINI DE ALMEIDA PRADO, ANTONIO FERNANDO	CA	IAC-18.C1.2.12
BERTACHINI DE ALMEIDA PRADO, ANTONIO FERNANDO	CA	IAC-18.E2.1.2
Bertacin, Roberto	CA	IAC-18.A3.5.4
Bertleff, Wieland	CA	IAC-18.C2.5.1
Bertoldi, Artur	A	IAC-18.C4.2.10
Bertoldi, Artur	CA	IAC-18.C4.IP.17
Berton, Jean-Christophe	CA	IAC-18.B6.IP.1
Besha, Patrick	CA	IAC-18.A3.2A.2
Besnard, Stephane	CA	IAC-18.A1.4.19
Besson, Sylvain	CA	IAC-18.D2.5.3
Bessone, Loredana	CA	IAC-18.A5.1.12
Betmann, Maximilian	A	IAC-18.E3.4.9
Bettiol, Laura	CA	IAC-18.B3.9-GTS.2.5
Bettiol, Laura	CA	IAC-18.B3.9-GTS.2.10
Bettiol, Laura	CA	IAC-18.E5.5.3
Bewick, Charlotte	A	IAC-18.B2.5.6
Bewick, Charlotte	CA	IAC-18.D1.IP.1
Beyer, Friederike	CA	IAC-18.A3.3A.7
Beyermann, Ulrich	CA	IAC-18.B4.3.8
Bezy, Jean-Loup	CA	IAC-18.B1.3.5
Bhagatji, Jimesh	CA	IAC-18.E2.4.7
Bhan, Rakesh Kumar	A	IAC-18.B1.3.9
Bharadwaj, Lalit	CA	IAC-18.D1.1.6
Bhaskaran, Shyam	CA	IAC-18.C1.6.11
Bhaskaran, Shyam	CA	IAC-18.C1.9.7
Bhat, M.S.	CA	IAC-18.C1.IP.16
Bhatt, Mukesh	CA	IAC-18.E1.4.2
Bhattacharjee, Shambo	A	IAC-18.A6.4.9
Bhattacharjee, Shambo	A	IAC-18.A6.9.4
Bhattacharjee, Shambo	A	IAC-18.A6.IP.9
Bhattarai, Suresh	CA	IAC-18.B2.4.3
Bhattarai, Suresh	CA	IAC-18.E1.5.12
Bhattarai, Suresh	A	IAC-18.A3.IP.66
Bhawsar, Yogesh	CA	IAC-18.D1.2.10
Bhawsar, Yogesh	CA	IAC-18.D1.IP.14
Bhui, Surmit	CA	IAC-18.C1.4.2
Bi, Ran	CA	IAC-18.C3.3.12
Bianchi, Germano	CA	IAC-18.A6.1.9
Bianchi, Germano	CA	IAC-18.A4.1.5
Bianchi, Germano	CA	IAC-18.A6.IP.10
Bianchi, Germano	CA	IAC-18.A6.7.7
Bianco, Alessandro	CA	IAC-18.D1.2.7
Bibring, Jean-Pierre	CA	IAC-18.A3.4A.2
Bidaux-Sokolowski, Ambroise	CA	IAC-18.A7.3.2
Bieda, Marcin	CA	IAC-18.B5.1.9
Biehler, Michael	CA	IAC-18.C4.IP.3
Biele, Jens	CA	IAC-18.A3.4A.2
Biele, Jens	CA	IAC-18.A3.4B.1
Biele, Jens	CA	IAC-18.A3.4B.6
Bielicki, Damian M.	A	IAC-18.D6.1.10
Bielicki, Damian M.	CA	IAC-18.A3.IP.7
Bierdel, Marius	A	IAC-18.C2.5.11
Bierwagen, Nora M.	CA	IAC-18.C4.2.8
Biesbroek, Robin	CA	IAC-18.A6.6.10
Bieze, Merlin	CA	IAC-18.D1.4B.3
Biggs, James	CA	IAC-18.C1.8.11
Biggs, James Douglas	CA	IAC-18.A3.2A.7
Biggs, James Douglas	CA	IAC-18.B4.8.5
Bigi, Gabriele	CA	IAC-18.D4.1.8
Bigi, Gabriele	CA	IAC-18.A5.1.5
Bigi, Gabriele	CA	IAC-18.D2.8-A5.4.6
Biktimirov, Shamil	A	IAC-18.D4.5.5
Billi, Daniela	CA	IAC-18.A1.6.12
Binci, Andrea	A	IAC-18.C4.IP.53
Binder, Tilman	CA	IAC-18.B4.2.2
Binder, Tilman	CA	IAC-18.C4.6.4
Bing, Hua	CA	IAC-18.B2.IP.10
Bing, Hua	CA	IAC-18.C1.IP.14
Bini, Nicoletta	CA	IAC-18.E7.2.2
Biniok, Matthias	CA	IAC-18.B3.7.8
Binns, David	A	IAC-18.A3.2B.7
Binsted, Kim	A	IAC-18.A1.IP.1
Binsted, Kim	CA	IAC-18.C3.4.7
Binti Enche Ab Rahim, Siti Amalina	A	IAC-18.B5.1.10
Birkenkampf, Peter	CA	IAC-18.B3.6-A5.3.5
Birreck, Dieter	A	IAC-18.B2.4.10
Bisegna, Fabio	CA	IAC-18.A1.6.9
Bishop, Sheryl	CA	IAC-18.D4.1.7
Bisht, Kamal Singh	A	IAC-18.A2.IP.14
Bissonnette, Vincent	CA	IAC-18.D1.2.7

Biswas, Janos	CA	IAC-18.A3.2A.9
Biswas, Sanat	A	IAC-18.B2.1.10
Blaber, Andrew	CA	IAC-18.A1.2.23
Blackerby, Chris	A	IAC-18.A6.8.6
Blancquaert, Thierry	CA	IAC-18.A3.3A.3
Blasi, Roland	CA	IAC-18.C4.1.2
Blindheim, Eirik Voje	CA	IAC-18.B4.4.2
Blindheim, Sandra	A	IAC-18.D2.2.6
Blommaert, Joris	CA	IAC-18.B4.4.7
Blonski, Daniel	A	IAC-18.B2.5.5
Blottner, Dieter	A	IAC-18.A1.2.15
Blottner, Dieter	CA	IAC-18.A1.IP.17
Blottner, Dieter	CA	IAC-18.A1.8.3
Blount, PJ	A	IAC-18.E7.5.5
Boakye, Owusu Ansah	A	IAC-18.E1.4.13
Boardman, Tanya	A	IAC-18.E1.6.10
Boardman, Tanya	CA	IAC-18.E1.5.10
Boardman, Tanya	CA	IAC-18.B6.1.4
Boazzo, Michael	CA	IAC-18.D2.8-A5.4.5
Bocci, Sandro	CA	IAC-18.A4.IP.3
Bockstahler, Klaus	A	IAC-18.D4.2.9
Bockstahler, Klaus	A	IAC-18.B3.7.1
Bode, Willem	CA	IAC-18.B2.1.2
Boden, Ralf	CA	IAC-18.A3.4B.6
Boehme, Matthias	CA	IAC-18.A2.6.1
Boella, Michele	A	IAC-18.B1.5.12
Boers, Theo	CA	IAC-18.C3.4.4
Bogachev, Sergey	CA	IAC-18.E2.4.8
BOGATYY, ALEKSANDR	A	IAC-18.C4.4.11
Boggs, Kathleen	CA	IAC-18.B3.3.1
Bogoi, Alina	CA	IAC-18.C4.9.12
Bohacek, Petr	CA	IAC-18.D3.1.10
Bohmeier, Maria	CA	IAC-18.A1.6.1
Boisard, Olivier	CA	IAC-18.D4.1.19
Boisard, Olivier	A	IAC-18.A3.IP.13
Boisard, Olivier	CA	IAC-18.B6.IP.3
Bojar, Konrad	A	IAC-18.A6.6.6
Bolanle, Olalekan-Ajayi	CA	IAC-18.A1.3.16
Bolanle, Olalekan-Ajayi	CA	IAC-18.A1.IP.40
Bolatti, Dante	A	IAC-18.C1.2.11
Boll, Nathan	CA	IAC-18.A7.1.3
Boll, Nathan	A	IAC-18.E1.4.8
Boll, Nathan	A	IAC-18.A1.7.14
Bolmont, Benoît	CA	IAC-18.A1.1.9
Bombardelli, Claudio	CA	IAC-18.A6.2.10
Bonaventure, François	CA	IAC-18.A6.7.4
Bongers, Edward	CA	IAC-18.C3.4.4
Bongiorno, Stephen	CA	IAC-18.B4.2.7
BONGUET, Patrick	CA	IAC-18.D2.1.2
Bonnal, Christophe	CA	IAC-18.B4.9-GTS.5.1
Bonney, Joachim	CA	IAC-18.A2.6.8
Bonsu, Benjamin	CA	IAC-18.E1.1.11
Bonsu, Benjamin	A	IAC-18.B4.9-GTS.5.4
Booth, Stephanie	A	IAC-18.D3.4.7
Bope, Ashleigh	CA	IAC-18.A2.7.13
Borchers, Kai	CA	IAC-18.B4.6A.8
Borders, Kareen	CA	IAC-18.E1.1.4
Borders, Kareen	A	IAC-18.E1.2.6
Borders, Kyla	A	IAC-18.E1.1.4
Bordi, Francesco	A	IAC-18.D1.5.2
Borg, Josef	CA	IAC-18.A6.1.9
Borggräfe, Andreas	CA	IAC-18.B3.1.6
Borggräfe, Andreas	CA	IAC-18.A3.2A.10
Borggräfe, Andreas	CA	IAC-18.A3.2B.7
Borggräfe, Andreas	CA	IAC-18.B4.5.13
Bornemann, Gerhild	A	IAC-18.A1.7.17
Borot, Antonin	CA	IAC-18.E1.9.9
Borovenko, Valentin	A	IAC-18.A3.IP.35
Borovikov, Aleksandr	CA	IAC-18.E2.4.8
Borovin, Gennady	CA	IAC-18.A6.7.5
Borowitz, Mariel	A	IAC-18.E3.3.10
Borowitz, Mariel	A	IAC-18.B1.4.3
Borowy, Carsten	A	IAC-18.B2.1.1
Borthakur, Bibhusana	CA	IAC-18.E1.4.7
Bortolotti, Claudio	CA	IAC-18.A6.1.9
Bortolotti, Claudio	CA	IAC-18.A6.IP.10
Borys, Maciej	CA	IAC-18.C2.IP.6
Borys, Maciej	CA	IAC-18.A3.5.3
Bosch Borràs, Eduard	CA	IAC-18.C4.8-B4.5A.7
Boscheri, Giorgio	CA	IAC-18.A1.IP.4
Boscheri, Giorgio	CA	IAC-18.B3.7.5
Boschetto, Alberto	CA	IAC-18.C2.9.6
Bossinger, Robert	CA	IAC-18.C2.6.2
Both, Wolfgang	A	IAC-18.E4.2.5
Botha, Marie	CA	IAC-18.E1.5.2
Bottai, Anastasia Giordana	CA	IAC-18.E5.5.3
Bottini, Luana	CA	IAC-18.C2.9.6
Bou-Ali Saidi, Mohammed Mounir	CA	IAC-18.A2.2.8
Bou-Ali Saidi, Mohammed Mounir	CA	IAC-18.A2.4.5
Bouckaert, Frank	CA	IAC-18.B3.9-GTS.2.7
Bouhanna, Zakaria	A	IAC-18.B2.2.7
Bourgeois, Emilie	CA	IAC-18.C2.8.3
Bousquet, Pierre W.	A	IAC-18.A3.3B.10
Bouwmeester, Jasper	CA	IAC-18.B4.6B.5
Bouziane, Mohammed	CA	IAC-18.C4.2.10
Bouziane, Mohammed	A	IAC-18.C4.IP.17
Boué, Yoan	A	IAC-18.C4.10.10
Bovensmann, Heinrich	A	IAC-18.B1.2.7
Boxberger, Adam	CA	IAC-18.B4.2.2
Boxberger, Adam	CA	IAC-18.C4.6.4
Boy, Christian	CA	IAC-18.C4.4.15
Božić, Ognjan	CA	IAC-18.C4.2.8
Brack, Daniel	A	IAC-18.C1.2.7
Brack, Daniel	A	IAC-18.C1.9.8
Bradbury, Laura	CA	IAC-18.B4.4.2
Bradbury, Laura	A	IAC-18.B4.4.8
Bradford, Andy	CA	IAC-18.D6.1.2
Bradford, Andy	CA	IAC-18.B4.5.9
Bradford, John	A	IAC-18.D3.2.7
Bradley, Nicholas	CA	IAC-18.C1.8.12
Brady, David	A	IAC-18.B3.3.3
Braithwaite, Timothy	CA	IAC-18.B3.1.3
Bramante, Lorenzo	CA	IAC-18.B6.3.5
Bramlage, Jeff	CA	IAC-18.C4.7-C3.5.3
Bramlage, Jeff	CA	IAC-18.C4.7-C3.5.10
Brammer, Uwe	CA	IAC-18.A7.IP.4
Branco, Joao	CA	IAC-18.A7.3.2
Branco, Joao	A	IAC-18.B6.2.11
Branco, Joao	CA	IAC-18.D1.6.10
Brandauer, Martin	CA	IAC-18.A3.2A.8
Brandenburger, Adam	CA	IAC-18.A7.3.12
Brandt, Alexander	CA	IAC-18.D1.IP.11
Brandt, Pontus	CA	IAC-18.D4.4.1
Brandt, Pontus	CA	IAC-18.D4.4.2
Brandão, Ana	CA	IAC-18.C4.IP.48
Brauer, Norbert	CA	IAC-18.D5.2.5
Braukhane, Andy	CA	IAC-18.A6.3.5
Braun, Hans Martin	CA	IAC-18.B4.8.9
Braun, Markus	CA	IAC-18.A1.3.9
Braun, Markus	CA	IAC-18.A1.8.14
Braun, Max	CA	IAC-18.A3.1.10
Braun, Vitali	CA	IAC-18.A6.2.6
Braun, Vitali	A	IAC-18.A6.2.8
Braun, Vitali	CA	IAC-18.A6.2.10
Brauns, Katharina	CA	IAC-18.A1.1.7
Brauns, Katharina	A	IAC-18.A1.1.8
Brauns, Katharina	A	IAC-18.A1.2.11
Brauns, Katharina	CA	IAC-18.A1.2.13
Brauns, Katharina	CA	IAC-18.A1.2.24
Brauns, Katharina	CA	IAC-18.A1.4.4
Brauns, Katharina	CA	IAC-18.A1.4.6
Brauns, Katharina	CA	IAC-18.A1.4.19
Braxmaier, Claus	CA	IAC-18.A2.1.7
Braxmaier, Claus	CA	IAC-18.A2.1.9
Braxmaier, Claus	CA	IAC-18.A2.1.13
Braxmaier, Claus	CA	IAC-18.A2.3.5
Braxmaier, Claus	CA	IAC-18.A2.IP.7
Brazier, Frances	CA	IAC-18.D1.1.2
Brcic, Jelena	A	IAC-18.A1.1.2
Brcic, Jelena	CA	IAC-18.A1.1.3
Brechenmacher, Nicolas	CA	IAC-18.D4.4.14
Bremer, Stefanie	CA	IAC-18.A2.1.2
Breteau, Jérôme	CA	IAC-18.D2.4.5
Brettle, Harriet	A	IAC-18.E1.6.2
Brettle, Harriet	A	IAC-18.A3.5.5
Brew, Julian	A	IAC-18.A6.10-C1.7.5
Breś, Włodzimierz	CA	IAC-18.A1.7.13
Bridges, Christopher P.	CA	IAC-18.B4.2.7
Bridges, Christopher P.	CA	IAC-18.B2.2.7
Bridges, Christopher P.	CA	IAC-18.B4.3.5
Bridges, Christopher P.	CA	IAC-18.A6.5.2
BRIENZA, Michael	CA	IAC-18.A2.6.13
Briese, Lâle Evrim	CA	IAC-18.C1.5.12
Brieß, Klaus	CA	IAC-18.B6.3.3
Briess, Klaus	CA	IAC-18.B2.2.1
Briess, Klaus	CA	IAC-18.E1.4.4
Brieß, Klaus	CA	IAC-18.C1.4.2
Brieß, Klaus	CA	IAC-18.B2.6.6
Brieß, Klaus	CA	IAC-18.B4.6B.14
Brieß, Klaus	CA	IAC-18.C2.8.8
Brighenti, Chiara	A	IAC-18.B6.1.6
Brilli, Simone	CA	IAC-18.A6.6.4
Brinkman, Dennis	CA	IAC-18.D1.IP.23
Brinkmann, Wiebke	A	IAC-18.D4.1.3
Brinkmann, Wiebke	CA	IAC-18.D3.2.12
Brinkmann, Wiebke	CA	IAC-18.D3.IP.2
Brinkmann, Wiebke	A	IAC-18.D1.6.5
Briot, Daniel	A	IAC-18.A6.4.1
Brischetto, Salvatore	CA	IAC-18.C2.8.10
Brischetto, Salvatore	CA	IAC-18.C2.9.8
Briskman, Robert D.	CA	IAC-18.B2.2.5
Britting, Thomas	CA	IAC-18.D2.5.12
Briz Valer, Jose Francisco	CA	IAC-18.D1.3.1
Brooker Lizon-Tati, Laure	A	IAC-18.B1.2.6
Brophy, John	CA	IAC-18.C4.4.1
BROUCQUART, Romain	CA	IAC-18.B2.2.3
Brouns, Stan	CA	IAC-18.D3.2.4
Brouns, Stan	CA	IAC-18.D3.3.9
Brouns, Stan	CA	IAC-18.A1.7.7
Brouns, Stan	CA	IAC-18.A3.2C.6
Brouns, Stan	CA	IAC-18.A2.7.12
Brown, Mia	A	IAC-18.E3.2.2
Brown, Patrick	CA	IAC-18.A1.5.2
Brozek, Petr	CA	IAC-18.A1.6.2
Brozny, Peter	CA	IAC-18.E1.2.5
Bru, Jorgen	CA	IAC-18.D2.4.5
Brucas, Domantas	CA	IAC-18.B2.7.7
Brucato, John Robert	CA	IAC-18.A3.5.11
Brun, Nicolas	CA	IAC-18.B3.4-B6.4.10
Brune, Jan-Erik	CA	IAC-18.E2.3-GTS.4.1
Brunet, Gautier	CA	IAC-18.E6.1.12
Brunner, Bernhard	CA	IAC-18.B4.6A.8
Brunner, Sebastian	CA	IAC-18.A3.2A.8
Bruno, Roberto	CA	IAC-18.A7.3.1
Bryant, Robert	CA	IAC-18.C2.6.2
Brykov, Vitaly	CA	IAC-18.A1.2.6
Brás, Sérgio	A	IAC-18.C1.4.10
Brás, Sérgio	CA	IAC-18.C1.IP.25
Bräuer, Frederik	CA	IAC-18.D1.4A.2
Bréhard, Florent	CA	IAC-18.C1.IP.32
Bröhan, Jasmin	CA	IAC-18.D1.3.5
Bubeev, Yuriy	CA	IAC-18.A1.IP.14
Bucci, Lorenzo	A	IAC-18.C1.1.11
Bucci, Lorenzo	A	IAC-18.A5.IP.2
Bucci, Lorenzo	A	IAC-18.C1.8.7
Bucher, Nico	CA	IAC-18.B4.3.2
Buchheim, Judith Irina	CA	IAC-18.B3.7.8
Buchhorn, Marcel	CA	IAC-18.B1.5.7
Buchwald, Robert	CA	IAC-18.A3.1.10
Buchwald, Robert	A	IAC-18.A3.2B.10
Buchwitz, Michael	CA	IAC-18.B1.2.7
Buchwitz, Michael	A	IAC-18.B1.IP.13
Buckey, Jay	A	IAC-18.A1.2.28
Budzyn, Dorota	CA	IAC-18.A5.1.6
Budzyn, Dorota	A	IAC-18.A5.1.12
Buenconsejo, Reina	CA	IAC-18.E6.1.11
Buhl, Matthias	CA	IAC-18.B5.3.9
Buiko, Alfredas	A	IAC-18.E4.3B.10
Buinhas, Luisa	CA	IAC-18.B2.8-GTS.3.12
Buinhas, Luisa	A	IAC-18.B2.3.2
Buist, Peter	A	IAC-18.B2.1.12
Buken, Christoph	CA	IAC-18.A2.7.11
Bulat, Sergey	CA	IAC-18.A1.6.12
Bulcha, Berhanu	CA	IAC-18.A7.3.8
Bulencea, Paul	CA	IAC-18.E1.8.4
Bultitude, James	A	IAC-18.B2.3.8
Bultitude, James	A	IAC-18.C4.IP.39
Bultitude, James	CA	IAC-18.B2.6.3
Bunte, Karl Dietrich	CA	IAC-18.A6.3.8
Bunte, Karl Dietrich	CA	IAC-18.A6.3.9
Bunte, Karl Dietrich	CA	IAC-18.A6.5.3
Bunte, Karl Dietrich	CA	IAC-18.D1.IP.8
Buongiorno, Alessandra	CA	IAC-18.B1.4.7
Buongiorno, Maria Fabrizia	CA	IAC-18.E5.5.3
Buravkova, Ludmila	CA	IAC-18.A1.8.11
Buravkova, Ludmila	A	IAC-18.A1.8.13
Burderi, Luciano	CA	IAC-18.B4.2.11
Burgay, Marta	CA	IAC-18.A4.1.9
Burgay, Marta	CA	IAC-18.A4.1.11
Burgdorf, Jonas	CA	IAC-18.B4.3.2
Burger, Edward	A	IAC-18.E7.4.9
Burguillos, Carlos	A	IAC-18.B2.8-GTS.3.2
Burke, James	A	IAC-18.E5.4.12
Burkhardt, Holger	A	IAC-18.D2.7.1
Burkhardt, Zachary	A	IAC-18.D4.4.6
Burkhardt, Zachary	A	IAC-18.D4.4.13
Burkhardt, Zachary	CA	IAC-18.D4.4.14
Burkova, Elena	CA	IAC-18.E1.7.3
Burmann, Bastian	A	IAC-18.A7.IP.4
Burov, Alexander	A	IAC-18.A3.IP.50
Burov, Alexander	A	IAC-18.D4.IP.3
Burrows, John P.	CA	IAC-18.B1.2.7
Burrows, John P.	CA	IAC-18.B1.3.7
Burrows, John P.	A	IAC-18.B1.IP.4
Burtz, Louis	CA	IAC-18.A3.IP.23
Burville, Kevin	CA	IAC-18.E2.3-GTS.4.10
Buscher, Martin	A	IAC-18.B6.3.3
Buscher, Martin	A	IAC-18.E1.4.4
Buscher, Martin	CA	IAC-18.B2.6.6
Buse, Fabian	A	IAC-18.D1.4B.1
Buslov, Eugene	CA	IAC-18.A6.3.10
Buslov, Eugene	CA	IAC-18.C2.6.1
Buss, Joshua	CA	IAC-18.D3.2.8
Bussi, Diego	A	IAC-18.B6.3.6
Bussler, Leonid	CA	IAC-18.D2.4.1
Bussler, Leonid	CA	IAC-18.D2.4.4
Bussmann, Kristin	CA	IAC-18.A3.2A.8
Butcher, Garnet	CA	IAC-18.E2.3-GTS.4.12
Buti, Corentin	A	IAC-18.E2.2.9
Buti, Corentin	CA	IAC-18.A5.1.5
Buti, Corentin	CA	IAC-18.E3.IP.13
Buzzoni, Alberto	CA	IAC-18.A6.7.7
Bérend, Nicolas	A	IAC-18.D2.7.8
Bérend, Nicolas	CA	IAC-18.D1.4B.12
Bölke, Daniel	CA	IAC-18.E2.3-GTS.4.1
Börner, Anko	CA	IAC-18.A3.2A.8
Böttger, Ute	CA	IAC-18.A1.6.12
Büskens, Christof	CA	IAC-18.A3.5.7
Büttner, Jonas	A	IAC-18.A2.5.2

C

Name	Role	Paper
C, RAJEEV SENAN	CA	IAC-18.C4.3.13
C B, Manjunath	A	IAC-18.B5.2.5
C Guerrieri, Dadui	CA	IAC-18.C4.6.1
C Guerrieri, Dadui	CA	IAC-18.C4.8-B4.5A.6
C R, THOMAS	CA	IAC-18.C4.IP.49
C. Nair, Manoj	A	IAC-18.B1.6-GTS.1.6

CABALLERO, Carlos	A	IAC-18.B1.1.12
Cabero, Marco	A	IAC-18.E1.4.6
Cabezas, Patricia	CA	IAC-18.A3.5.11
Cabrera Alvarado, Sandra	A	IAC-18.E7.3.6
Cacciapuoti, L.	CA	IAC-18.A2.1.4
Caeiro, Sofia	CA	IAC-18.C2.1.11
CAI, Wenyi	A	IAC-18.B3.2.13
Cai, Zun	CA	IAC-18.C4.IP.32
Caiani, Enrico Gianluca	CA	IAC-18.A1.2.5
Caiani, Enrico Gianluca	A	IAC-18.A1.2.22
Caiazzo, Antonio	A	IAC-18.A6.4.4
Caiazzo, Antonio	CA	IAC-18.D4.4.14
CaJacob, Daniel	CA	IAC-18.B4.4.1
Cakir, Tugrul	A	IAC-18.E7.1.3
Caldera, Carlo	CA	IAC-18.A3.2A.11
Calini, Gian-Gherardo	CA	IAC-18.B2.5.1
Calles, Walter	CA	IAC-18.D3.1.6
Calles, Walter	CA	IAC-18.D3.IP.6
Calles, Walter	A	IAC-18.D3.4.11
Callsen, Steffen	A	IAC-18.D3.2.10
Calnan, Gary	CA	IAC-18.D4.5.18
Calvel, Alain	CA	IAC-18.C3.4.4
Calvi, Daniele	CA	IAC-18.B4.6B.13
Calvin, Alexandra	CA	IAC-18.D4.1.1
Calvo Alvarado, Julio César	CA	IAC-18.B4.1.4
Calvo-Obando, Ana Julieta	CA	IAC-18.B4.1.4
Calzada-Diaz, Abigail	A	IAC-18.A3.2B.4
Calzada-Diaz, Abigail	CA	IAC-18.A5.1.9
Calzada-Diaz, Abigail	CA	IAC-18.A3.IP.7
Cameron, Bruce	CA	IAC-18.B2.1.7
Campagnola, Stefano	A	IAC-18.B4.8.2
Campagnola, Stefano	A	IAC-18.C1.9.11
Campbell, Tori	A	IAC-18.D2.2.12
Campos Mora, José Ricardo	CA	IAC-18.B4.4.5
Campuzano, Brian	CA	IAC-18.B4.3.4
Canalias, Elisabet	CA	IAC-18.C1.2.8
Canals Pou, Alberto	CA	IAC-18.A3.2C.6
Candela, Kyle	CA	IAC-18.A3.4B.8
Canetri, Marco	CA	IAC-18.A7.3.2
Canetri, Marco	CA	IAC-18.A3.4B.4
Canfield, Peter	A	IAC-18.A2.6.15
Canfield, Peter	CA	IAC-18.A2.7.18
Canga, Michael	A	IAC-18.E3.6.2
Canganella, Francesco	CA	IAC-18.A1.6.3
Cannon, Allan	CA	IAC-18.B4.9-GTS.5.9
Cano Martinez, Jorge	CA	IAC-18.E2.3-GTS.4.11
Cantini, Federico	CA	IAC-18.A3.IP.51
Canton, Remi	A	IAC-18.A2.6.9
Canuto, Enrico	CA	IAC-18.C1.6.4
Cao, Hui	A	IAC-18.D1.3.7
Cao, Hui	A	IAC-18.D1.IP.18
Cao, Hui	A	IAC-18.D5.IP.1
Cao, Hui	A	IAC-18.C2.8.12
Cao, Jianfeng	CA	IAC-18.B2.IP.8
CAO, Lingling	A	IAC-18.C2.1.9
CAO, Meng	A	IAC-18.B2.7.9
Cao, Ruiheng	CA	IAC-18.E3.6.11
Cao, Yan	CA	IAC-18.A6.3.1
Cao, Zhanwei	CA	IAC-18.C2.IP.34
Capannolo, Andrea	A	IAC-18.A3.4A.8
Capararo, Cesare	CA	IAC-18.B3.4-B6.4.5
Capello, Elisa	CA	IAC-18.C1.4.9
Capuano, Giuseppe	CA	IAC-18.D1.3.3
Capuano, Maurizio	CA	IAC-18.A3.3A.3
Capuano, Vincenzo	A	IAC-18.D1.3.3
Capuano, Vincenzo	A	IAC-18.D1.6.9
Capurso, Andrea	A	IAC-18.E7.1.12
Carberry, Christopher	CA	IAC-18.D1.1.5
Carberry, Christopher	A	IAC-18.E3.2.9
Cardillo, Daniele	CA	IAC-18.C4.5.7
Cardini, Valerio	A	IAC-18.C2.9.6
Cardona, Tommaso	A	IAC-18.A6.IP.4
Cardone, Mauro	A	IAC-18.B2.4.2
Cardone, Tiziana	CA	IAC-18.C2.1.11
CARDONE, Tiziana	CA	IAC-18.A6.3.9
CARDONE, Tiziana	CA	IAC-18.A6.5.3
Cardoso, Cristovao	A	IAC-18.C2.2.9
Cardoso dos Santos, Josué	A	IAC-18.A3.IP.57
Carey, Stephanie	CA	IAC-18.A1.3.8
Carey, William	CA	IAC-18.A3.1.10
Carey, William	CA	IAC-18.D4.2.5
Carey, William	CA	IAC-18.A2.5.10
Carioscia, Sara	A	IAC-18.E3.3.9
Carletta, Stefano	A	IAC-18.C1.1.10
Carli, Cristian	CA	IAC-18.A3.1.12
Carlo, Antonio	CA	IAC-18.E7.1.8
Carlson, Jack	CA	IAC-18.E1.4.7
Carnelli, Ian	CA	IAC-18.A3.4A.5
Carnelli, Ian	CA	IAC-18.A3.4A.6
Carnero-Diaz, Eugenie	CA	IAC-18.A1.8.17
Carnero-Diaz, Eugenie	CA	IAC-18.A2.7.17
Caron, Jérôme	CA	IAC-18.B1.3.5
Carpenter, James	CA	IAC-18.A3.2B.2
Carpenter, James	CA	IAC-18.A3.2B.7
Carpentiero, Marco	A	IAC-18.B2.1.11
Carr, John	CA	IAC-18.A5.2.4
Carreira, Lúcia	CA	IAC-18.A3.3B.7
Carrera, Erasmo	CA	IAC-18.C2.2.10
Carroll, Kieran	A	IAC-18.B4.8.8
Carroll, Kieran	A	IAC-18.A3.4B.3
Carrubba, Elisa	CA	IAC-18.E1.3.6
Carré, Antoine	CA	IAC-18.E2.3-GTS.4.2
Carré, Antoine	CA	IAC-18.E2.3-GTS.4.4
Carré, Antoine	CA	IAC-18.A5.1.5
Carstens, Anna Catharina	CA	IAC-18.A1.6.2
Carstens, Anna Catharina	A	IAC-18.A1.8.14
Carter, Brett	CA	IAC-18.A6.9.2
Caruana, Jean-Noel	CA	IAC-18.D2.4.5
Carvajal-Godinez, Johan	A	IAC-18.B4.7.2
Carvajal-Godínez, Johan	CA	IAC-18.B4.1.4
Carvajal-Godínez, Johan	CA	IAC-18.B4.9-GTS.5.3
Carvalho, Jean Paulo dos Santos	CA	IAC-18.A3.IP.57
Carvalho Silva, Leandro	CA	IAC-18.D1.IP.12
Casalino, Lorenzo	A	IAC-18.C1.IP.30
Casanova, Sophia	A	IAC-18.D4.5.7
Casas del Valle Pacheco, Isidora	CA	IAC-18.B4.1.5
Casas del Valle Pacheco, Isidora	A	IAC-18.E5.4.6
Casasco, Massimo	CA	IAC-18.A3.4A.5
Casasco, Massimo	CA	IAC-18.A3.IP.54
Cascioli, Gael	CA	IAC-18.D1.IP.5
Cash, Ian	A	IAC-18.C3.1.4
Casini, Andrea Emanuele Maria	CA	IAC-18.C2.8.10
Casini, Andrea Emanuele Maria	CA	IAC-18.C2.9.8
Casini, Stefano	CA	IAC-18.D1.IP.5
Caspar, Christophe	CA	IAC-18.B1.IP.3
Cassady, R. Joseph	CA	IAC-18.D1.1.5
Cassady, R. Joseph	A	IAC-18.C4.4.2
Cassi, Carlo	A	IAC-18.D2.4.8
CASTANET, Fabien	A	IAC-18.D5.2.6
CASTANET, Fabien	CA	IAC-18.D1.5.3
Castanón Esteban, Adrián	CA	IAC-18.A7.2.6
Castellanos Velasco, Luis Ángel	A	IAC-18.E5.5.6
Castiglioni, Paolo	CA	IAC-18.A1.2.24
Castiglioni, Paolo	CA	IAC-18.A1.4.4
Castillo, Martin	A	IAC-18.A2.2.9
Castillo, Martin	CA	IAC-18.C2.8.11
Castro, Jose	CA	IAC-18.A6.IP.34
Castro Villalobos, J Humberto	A	IAC-18.E7.7-B3.8.1
Castronuovo, Marco M.	CA	IAC-18.A6.IP.4
Castronuovo, Marco M.	CA	IAC-18.A3.5.4
Casu, Silvia	CA	IAC-18.A4.1.9
Catalano, Gabriella	A	IAC-18.E7.3.11
Cataldo, Giuseppe	A	IAC-18.D1.IP.25
Cataldo, Giuseppe	A	IAC-18.A7.3.8
Cater, John	CA	IAC-18.E1.3.1
Causevic, Adrian	CA	IAC-18.E2.3-GTS.4.1
Causevic, Adrian	A	IAC-18.A2.IP.15
Causse, Mickaël	CA	IAC-18.B3.6-A5.3.7
Cavallaro, Giuseppe	CA	IAC-18.A6.9.3
Cavenago, Francesco	A	IAC-18.D1.6.8
Cebolla Alvarez, Ana Maria	CA	IAC-18.A1.IP.34
Ceccherini, Simone	CA	IAC-18.A3.2A.7
Ceccherini, Simone	CA	IAC-18.C1.6.13
Ceccherini, Simone	CA	IAC-18.B4.8.5
Cecchini, Federico	A	IAC-18.C2.9.11
Cecere, Anselmo	CA	IAC-18.C2.4.4
Cecere, Anselmo	CA	IAC-18.C4.3.6
Cecere, Anselmo	A	IAC-18.A2.3.9
Ceciliano-Jiménez, Yolanda	A	IAC-18.E6.2.9
Cegarra Polo, Manuel	A	IAC-18.A6.1.2
Cegarra Polo, Manuel	CA	IAC-18.A6.10-C1.7.12
Celine, Loisel	CA	IAC-18.B2.2.3
Celotti, Luca	CA	IAC-18.A3.2C.3
Celotti, Luca	A	IAC-18.A3.2C.4
Cenac-Morthe, Celine	CA	IAC-18.A3.4A.2
Centuori, Simone	A	IAC-18.A3.3A.5
Centuori, Simone	CA	IAC-18.C1.9.2
Cergna, Paolo	CA	IAC-18.B3.4-B6.4.5
Cerini, Corinna	CA	IAC-18.C2.IP.5
Ceriotti, Matteo	CA	IAC-18.D4.3.18
Ceriotti, Matteo	CA	IAC-18.A3.4B.6
Cervone, Angelo	CA	IAC-18.A3.2A.7
Cervone, Angelo	CA	IAC-18.C4.6.1
Cervone, Angelo	CA	IAC-18.C4.6.2
Cervone, Angelo	CA	IAC-18.B4.8.5
Cervone, Angelo	CA	IAC-18.C4.8-B4.5A.6
CESCO, Nathalie	A	IAC-18.C4.10.13
Cespedes Ulate, Robinson	CA	IAC-18.B4.4.5
Cetin, Dogu	CA	IAC-18.D3.2.12
Cetin, Dogu	CA	IAC-18.D3.IP.2
Chabot, Thomas	CA	IAC-18.A6.5.1
Chaffardon, Christopher	A	IAC-18.D2.5.1
Chaffim Costa, Marcus Vinícius	CA	IAC-18.C4.2.10
Chagas Junior, Milton	CA	IAC-18.D3.4.12
CHAIZE, Mathieu	A	IAC-18.D2.1.2
Chakma, Mitesh	A	IAC-18.B1.IP.26
Chakrabarty, Soumyabrata	CA	IAC-18.B1.3.9
Chakrani, Jaafar	CA	IAC-18.C4.6.3
Chamberlain, Matthew	A	IAC-18.C3.4.2
Chan, Yung-An	A	IAC-18.C4.7-C3.5.12
Chancharoen, Wares	A	IAC-18.E1.2.8
Chandiramani, Mohita	CA	IAC-18.C3.1.3
Chandiramani, Mohita	A	IAC-18.A4.2.11
Chandra, Rohan	A	IAC-18.A5.IP.8
Chandran, Amal	CA	IAC-18.B4.2.6
Chandrashekar, Kishore	CA	IAC-18.E2.4.7
Chandrashekharan, Prasanth	A	IAC-18.C4.IP.5
Chandrashekharan, Prasanth	CA	IAC-18.C4.IP.10
Chang, Eva Yi-Wei	A	IAC-18.D6.3.5
Chang, Eva Yi-Wei	A	IAC-18.D6.3.8
Chang, Eva Yi-Wei	A	IAC-18.D2.9-D6.2.2
Chang, Fangwei	CA	IAC-18.E2.3-GTS.4.7
Chang, Loren	A	IAC-18.B4.2.6
Chang Diaz, Franklin	CA	IAC-18.A5.2.4
Channumsin, Sittiporn	A	IAC-18.B6.1.2
Chao, Chi-Kuang	CA	IAC-18.B4.2.6
Chao, Tan	A	IAC-18.B2.IP.7
Charlton, Oliver	CA	IAC-18.E1.4.7
Chatzipanagiotis, Michail	A	IAC-18.D6.1.3
Chaudhary, Jayraj	CA	IAC-18.D6.3.1
Chauhan, Shivangi	A	IAC-18.D3.2.9
Chauhan, Shivangi	CA	IAC-18.A4.IP.7
Chauhan, Shivangi	CA	IAC-18.D3.IP.5
Chauhan, Shivangi	A	IAC-18.C3.4.8
Chauhan, Shivangi	A	IAC-18.D4.5.12
Chaumette, Francois	CA	IAC-18.A6.5.1
Chavagnac, Christophe	CA	IAC-18.D2.6.3
Chaves Jiménez, Adolfo	CA	IAC-18.B4.1.4
Chaves Jiménez, Adolfo	CA	IAC-18.B4.9-GTS.5.3
Chavez, Cristian	A	IAC-18.E1.3.4
Chavez, Cristian	CA	IAC-18.E1.IP.21
Chavy, Siegfrid	CA	IAC-18.D2.1.2
Chazov, Vadim	CA	IAC-18.A6.IP.43
Chebakov, Evgeny	CA	IAC-18.C2.7.4
Cheetham, Bradey	CA	IAC-18.A3.IP.18
Chen, Changyuan	CA	IAC-18.B2.3.8
Chen, Chao	CA	IAC-18.D2.3.5
Chen, Chaoyun	CA	IAC-18.D3.3.5
Chen, Chuan	CA	IAC-18.A6.IP.23
Chen, David Kuan-Wei	CA	IAC-18.E3.1.14
Chen, Ding	A	IAC-18.A4.1.10
Chen, Dong	CA	IAC-18.B2.3.7
Chen, Fuzhen	A	IAC-18.A2.IP.4
Chen, Gang	CA	IAC-18.D1.4A.10
Chen, Hongru	A	IAC-18.C1.2.8
Chen, Jaffly	CA	IAC-18.E1.4.7
Chen, Ji	CA	IAC-18.B4.2.9
Chen, Jianlin	A	IAC-18.C1.1.3
Chen, Li	CA	IAC-18.C2.IP.35
Chen, Lian-zhong	CA	IAC-18.C2.7.12
Chen, Nan	CA	IAC-18.D2.2.3
Chen, Sihao	CA	IAC-18.D1.4A.10
CHEN, Wenjing	CA	IAC-18.D2.2.3
Chen, Xi	CA	IAC-18.E5.4.9
Chen, Xi	A	IAC-18.A3.IP.46
Chen, Xiaoqian	CA	IAC-18.B4.6A.2
Chen, Xingyu	CA	IAC-18.D1.1.6
Chen, Xuan	CA	IAC-18.C2.IP.34
Chen, Yen-Sen	A	IAC-18.C4.2.4
Chen, Yi	CA	IAC-18.B5.3.4
Chen, Yueyong	CA	IAC-18.A2.2.10
Chen, Zheng	CA	IAC-18.A3.5.8
Chen, Zhiming	A	IAC-18.B2.IP.10
Chen, Zhiming	CA	IAC-18.C1.IP.14
Cheney, Thomas	A	IAC-18.E7.IP.8
Cheney, Thomas	CA	IAC-18.E4.3B.8
Cheng, Andrew	CA	IAC-18.C1.9.7
CHENG, Jiming	A	IAC-18.C4.IP.13
Cheng, Mengzhe	CA	IAC-18.B1.4.6
Cheng, Rui	CA	IAC-18.D5.2.11
Cheng, Shengqing	A	IAC-18.C4.1.7
Cheng, Yuqiang	CA	IAC-18.C4.IP.32
Cheng long, Rao	CA	IAC-18.B3.2.13
Chenghu, Yang	CA	IAC-18.C4.1.15
Chepko, Ariane	CA	IAC-18.A1.2.28
Cheremisin, Maksim	A	IAC-18.B3.3.4
Chern, Rock Jeng-Shing	CA	IAC-18.D6.3.5
Chern, Rock Jeng-Shing	CA	IAC-18.D6.3.8
Chern, Rock Jeng-Shing	CA	IAC-18.D2.9-D6.2.2
Cherniakov, Mike	CA	IAC-18.B1.3.10
Chernikhova, Ekaterina	CA	IAC-18.A1.IP.18
Chernikova, Anna	CA	IAC-18.A1.2.3
Chernykh, Irina	A	IAC-18.E7.4.7
Chernyshov, Alexander	CA	IAC-18.B4.7.6
Cheron, Guy	CA	IAC-18.A1.IP.34
Cherukuri, Srikara	CA	IAC-18.E6.1.9
Cherukuri, Srikara	A	IAC-18.D1.IP.31
Chester, Ed	CA	IAC-18.E1.6.10
Chester, Ed	CA	IAC-18.E1.5.10
Chester, Ed	A	IAC-18.B6.1.4
Chester, Ed	CA	IAC-18.E1.9.10
Chhun, Ratana	CA	IAC-18.A2.1.1
Chi, Zhemin	CA	IAC-18.C1.8.4
Chibing, Shen	A	IAC-18.C4.9.9
Chibing, Shen	CA	IAC-18.C4.9.10
Chibing, Shen	A	IAC-18.C4.3.4
Chikuma, Ryosuke	CA	IAC-18.B3.9-GTS.2.3
Chime, Christian	CA	IAC-18.E1.2.2
Chinn, James	A	IAC-18.A6.3.3
Chitilappilly T., Lazar	CA	IAC-18.C4.10.12
Chitu, Cristian Corneliu	CA	IAC-18.A3.4B.4
Chiu, S.W.	A	IAC-18.E5.4.8
Chmielewski, Artur B.	CA	IAC-18.A3.4B.5
Cho, Mengu	CA	IAC-18.B4.2.3
Cho, Mengu	A	IAC-18.D5.1.6
Cho, Mengu	CA	IAC-18.E5.4.7
Cho, Mengu	A	IAC-18.D5.3.4
Cho, Yeon	CA	IAC-18.C2.7.10
Choden, Yeshey	CA	IAC-18.B5.2.1
Choi, Eric	CA	IAC-18.A2.5.11

Choi, Jongin	CA	IAC-18.C4.IP.43
Choi, Young-Jun	CA	IAC-18.A3.IP.53
Chopra, Chaitnya	CA	IAC-18.A7.IP.1
Chopra, Chaitnya	A	IAC-18.B4.7.5
Choudhary, Shreya	A	IAC-18.A1.8.5
Chouker, Alexander	CA	IAC-18.A1.2.10
Chouker, Alexander	CA	IAC-18.A1.3.3
Chouker, Alexander	CA	IAC-18.A1.3.9
Chow, Chee Lap	CA	IAC-18.B4.7.10
Chowdhury, Sreemon	CA	IAC-18.C3.2.5
Chowdhury, Sreemon	CA	IAC-18.B2.3.4
Chriskos, Panteleimon	CA	IAC-18.A1.3.13
Chriskos, Panteleimon	A	IAC-18.A1.3.14
Christ, Venzha	A	IAC-18.E5.IP.13
Christensen, Carissa	A	IAC-18.E6.2.1
Christensen, Ian	A	IAC-18.D6.1.6
Christensen, Ian	CA	IAC-18.E3.4.2
Christensen, Ian	CA	IAC-18.D1.5.8
Christensen, Ian	CA	IAC-18.E7.7-B3.8.13
Christian, Meganne	CA	IAC-18.C2.8.5
Christiansen, Eric	CA	IAC-18.A6.3.8
Christiansen, Rowena	CA	IAC-18.E1.4.7
Chronas Foteinakis, Nikitas	CA	IAC-18.B4.6B.5
Chuan, Ma	CA	IAC-18.A6.IP.42
Chujo, Toshihiro	A	IAC-18.D1.2.4
Chujo, Toshihiro	CA	IAC-18.C1.3.2
Chujo, Toshihiro	CA	IAC-18.C1.6.8
Chung, D.-W.	CA	IAC-18.E2.2.4
Chung, Soon-Jo	CA	IAC-18.C1.6.3
Chung, Soon-Jo	CA	IAC-18.C1.6.11
Chung, Soon-Jo	CA	IAC-18.D1.6.9
Chung, Soyoung	A	IAC-18.A3.IP.58
Churkin, Dmitriy	CA	IAC-18.B3.5.1
Ciallella, Mirco	CA	IAC-18.D1.IP.5
Cialone, Giammarco	CA	IAC-18.E1.3.7
Cialone, Giammarco	CA	IAC-18.A6.IP.11
Cialone, Giammarco	CA	IAC-18.A6.IP.36
Cialone, Giammarco	CA	IAC-18.A6.10-C1.7.9
Cialone, Giammarco	CA	IAC-18.B4.6B.10
Cialone, Giammarco	CA	IAC-18.B2.7.4
Ciancetta, Ezio	A	IAC-18.D1.2.2
Ciarciaglini, Andrea	CA	IAC-18.C2.IP.10
Ciardi, Marco	CA	IAC-18.E4.3B.13
Ciardullo, Christina	CA	IAC-18.A1.IP.11
Ciccacci, Leonardo	CA	IAC-18.C2.8.7
Ciccarelli, Silvia	CA	IAC-18.E3.2.6
Ciccarelli, Silvia	CA	IAC-18.E3.3.5
Ciccarelli, Silvia	CA	IAC-18.E3.IP.8
Ciccarelli, Silvia	A	IAC-18.E7.IP.6
Cichan, Timothy	A	IAC-18.A5.1.4
Cieslinski, Dawid	A	IAC-18.D2.9-D6.2.11
Cinelli, Ilaria	CA	IAC-18.E6.1.5
Cinelli, Ilaria	CA	IAC-18.A1.4.3
Cinelli, Ilaria	CA	IAC-18.B3.5.6
Cinelli, Ilaria	CA	IAC-18.E5.IP.10
Cinelli, Ilaria	CA	IAC-18.B6.2.5
Cinquepalmi, Luca	CA	IAC-18.B6.3.9
Cipriani, Fabrice	CA	IAC-18.D1.IP.8
Cipriano, Ana	CA	IAC-18.A3.2A.7
Cipriano, Ana	CA	IAC-18.A3.2B.7
Cipriano, Ana	CA	IAC-18.B4.8.5
Cipriano, Ana	CA	IAC-18.C1.8.11
Cirillo, William	CA	IAC-18.A3.1.3
Cirina, Cristiana	CA	IAC-18.E3.2.6
Cirina, Cristiana	CA	IAC-18.E3.4.11
Ciska, Malgorzata	CA	IAC-18.A1.8.2
Ciska, Malgorzata	CA	IAC-18.A2.7.17
Ciufolini, Ignazio	CA	IAC-18.C2.8.13
Clancy, Paul	CA	IAC-18.D2.4.7
Clarence Dee, Jan	CA	IAC-18.B4.4.6
Clark, Justin	A	IAC-18.C4.6.8
Clark, Roger	CA	IAC-18.D3.3.1
Clark, Torin	CA	IAC-18.A1.2.19
Clavé, Elise	CA	IAC-18.A3.3B.3
Clayfield, Kimberley	A	IAC-18.B4.4.12
Clayfield, Kimberley	CA	IAC-18.D4.2.2
Clayfield, Kimberley	CA	IAC-18.E3.3.1
Clemens, Joachim	A	IAC-18.A3.5.7
Clerc, Philippe	CA	IAC-18.E3.4.10
Clerc, Philippe	A	IAC-18.A6.8.12
Clinton, Raymond "Corky"	A	IAC-18.C2.9.2
Cocco, Magda	CA	IAC-18.E3.1.13
Cocco, Magda	A	IAC-18.D4.2.3
Cocco, Magda	A	IAC-18.D6.3.2
Cocco, Magda	A	IAC-18.E3.IP.6
Cocco, Magda	CA	IAC-18.E7.5.8
Cocco, Magda	CA	IAC-18.E7.7-B3.8.3
Cocco, Magda	CA	IAC-18.E4.3B.12
Cockrell Jr., Charles E.	CA	IAC-18.D4.4.12
Cockshaw, Rory	CA	IAC-18.E1.2.5
Cocuzza, Silvio	CA	IAC-18.C1.IP.35
Cocuzza, Silvio	CA	IAC-18.D1.IP.26
Coelho, Pedro	CA	IAC-18.D4.5.18
Coene, Sander	A	IAC-18.B3.6-A5.3.8
Cohen, Arielle	A	IAC-18.D2.IP.12
Cohen, Brendan	A	IAC-18.E7.2.5
Cohen, Dan	CA	IAC-18.D5.IP.2
Cohen, Luchino	CA	IAC-18.B3.3.3
Cohen, Marc	A	IAC-18.B1.2.2
Coker, Robert H.	CA	IAC-18.A1.4.21
Colagrossi, Andrea	A	IAC-18.C1.3.8
Colagrossi, Andrea	CA	IAC-18.A5.IP.2
Colangelo, Luigi	CA	IAC-18.C1.6.4
Colangelo, Luigi	A	IAC-18.C1.IP.26
Cole, Timothy	A	IAC-18.A3.5.12
Coleman, Nikki	A	IAC-18.E3.IP.10
Coleman, Nikki	CA	IAC-18.A6.8.7
Coleman, Stephen	CA	IAC-18.E3.IP.10
Coleman, Stephen	A	IAC-18.A6.8.7
Coleshill, Elliott	CA	IAC-18.D1.IP.30
Coletta, Alessandro	CA	IAC-18.B1.1.11
Collange, Guillaume	CA	IAC-18.D2.1.2
Collins, Patrick	CA	IAC-18.B3.2.7
Colmenarejo, Pablo	A	IAC-18.D1.3.1
Colmenarejo, Pablo	A	IAC-18.D1.6.10
Colombo, Camilla	CA	IAC-18.C1.1.4
Colombo, Camilla	A	IAC-18.A6.2.10
Colombo, Camilla	CA	IAC-18.A6.4.6
Colombo, Camilla	CA	IAC-18.A6.4.8
Colombo, Camilla	CA	IAC-18.B1.IP.31
Colombo, Camilla	CA	IAC-18.C1.IP.22
Colombo, Camilla	CA	IAC-18.A3.5.10
Colombo, Camilla	CA	IAC-18.A6.10-C1.7.8
Colombo, Camilla	CA	IAC-18.A6.10-C1.7.11
Colombo, Camilla	CA	IAC-18.C1.9.12
Colonna Walewski, Augustin	CA	IAC-18.D4.1.8
Colonna Walewski, Augustin	CA	IAC-18.A5.1.5
Colonna Walewski, Augustin	CA	IAC-18.B4.7.9
Comellini, Anthea Evelina	A	IAC-18.A6.5.6
Compin, Matthieu	CA	IAC-18.E2.4.4
Comune, Alessandro	CA	IAC-18.D3.4.4
Concu, Raimondo	CA	IAC-18.A4.1.6
Concu, Raimondo	CA	IAC-18.A4.1.9
Concu, Raimondo	CA	IAC-18.A4.1.11
Condlin, Christopher	CA	IAC-18.E7.2.5
Condurache, Daniel	A	IAC-18.C1.IP.23
Conigliaro, Christian	A	IAC-18.B4.6B.13
Connolly, John	A	IAC-18.A3.1.3
Connolly, John	A	IAC-18.D1.1.5
Connors, Martin	CA	IAC-18.B4.8.8
Conte, Alexis	CA	IAC-18.B4.2.2
Conte, Alexis	CA	IAC-18.C4.6.4
Conte, Davide	A	IAC-18.A5.1.6
Conte, Davide	A	IAC-18.C1.IP.31
Conticello, Simon Silvio	CA	IAC-18.B4.4.7
Conticello, Simon Silvio	CA	IAC-18.D3.3.11
Contractor, Noshir	CA	IAC-18.A1.1.4
Contreras, Joel	CA	IAC-18.B4.6B.9
Contreras, Rafael	CA	IAC-18.C1.5.10
Contreras, Rafael	CA	IAC-18.C1.IP.38
Contreras, Rafael	CA	IAC-18.A7.3.2
Convenevole, Carlo	CA	IAC-18.B1.2.12
Copin, Etienne	CA	IAC-18.E2.4.6
Coppotelli, Giuliano	CA	IAC-18.C2.IP.5
Corallo, Francesco	CA	IAC-18.D1.IP.5
Corbin, Benjamin	A	IAC-18.E6.1.11
Corcoran, Patrick	CA	IAC-18.E1.4.7
Cordelli, Emiliano	CA	IAC-18.A6.IP.6
Cordero, Federico	CA	IAC-18.A3.4B.6
Cordes, Florian	CA	IAC-18.D4.1.3
Cornelius, Merle	CA	IAC-18.A2.1.11
Cornell, Ariane	A	IAC-18.D2.7.7
Cornu, Nicolas	CA	IAC-18.C4.4.9
Corpaccioli, Luca	CA	IAC-18.D3.2.10
Corpaccioli, Luca	CA	IAC-18.D5.3.1
Corpino, Sabrina	CA	IAC-18.B4.6B.13
Corpino, Sabrina	CA	IAC-18.B4.8.11
Corpino, Sabrina	CA	IAC-18.C4.8-B4.5A.7
Corradi, Paolo	CA	IAC-18.A3.4B.4
Corradino, Filippo	A	IAC-18.B4.8.11
Corraro, Federico	CA	IAC-18.D1.3.3
Correia Mendonça, Helena	A	IAC-18.E3.1.13
Correia Mendonça, Helena	CA	IAC-18.D4.2.3
Correia Mendonça, Helena	CA	IAC-18.D6.3.2
Correia Mendonça, Helena	CA	IAC-18.E3.IP.6
Correia Mendonça, Helena	A	IAC-18.E7.5.8
Correia Mendonça, Helena	A	IAC-18.E7.7-B3.8.3
Correia Mendonça, Helena	A	IAC-18.E4.3B.12
Corrigan, Aidan	CA	IAC-18.B3.9-GTS.2.4
Cortesao, Marta	A	IAC-18.A2.7.15
Cortesão, Marta	CA	IAC-18.A1.3.18
Corydon, Thomas	CA	IAC-18.A1.8.7
Corzo Zamora, María Alejandra	CA	IAC-18.E5.1.12
Corzo Zamora, María Alejandra	CA	IAC-18.A1.IP.39
Cosby, Matthew	CA	IAC-18.A3.2A.10
Cosby, Matthew	CA	IAC-18.B4.5.13
Cosby, Matthew	CA	IAC-18.B6.1.4
Costa, Ivo	CA	IAC-18.C2.2.9
Costa, Maria	CA	IAC-18.B5.2.13
Costantini, Lorenzo	CA	IAC-18.A1.2.22
COSTE, DARREN	A	IAC-18.D4.3.16
Costello, Kirt	CA	IAC-18.B3.3.3
Cote, Stephane	CA	IAC-18.B1.1.9
Cotronei, Vittorio	CA	IAC-18.A1.3.10
Cotronei, Vittorio	CA	IAC-18.B3.3.3
Cotten, Brad	CA	IAC-18.B4.4.2
Cottin, Herve	CA	IAC-18.A1.6.8
Cotuk, Hasan Birol	A	IAC-18.A1.IP.29
Coutinho, Diogo	A	IAC-18.D3.1.4
Coutinho, Pedro	CA	IAC-18.E1.6.10
Couzin, Patrice	CA	IAC-18.A7.IP.4
Covington, Steven	CA	IAC-18.B1.2.10
Cowings, Patricia	A	IAC-18.B3.5.2
Cowley, Aidan	CA	IAC-18.D3.2.4
Cowley, Aidan	CA	IAC-18.E5.1.8
Cowley, Aidan	CA	IAC-18.E5.1.10
Cowley, Aidan	CA	IAC-18.D3.3.9
Cowley, Aidan	CA	IAC-18.A3.IP.5
Cowley, Aidan	A	IAC-18.A3.IP.40
Cowley, Aidan	CA	IAC-18.B3.6-A5.3.8
Cowley, Aidan	CA	IAC-18.B3.6-A5.3.9
Cowley, Aidan	CA	IAC-18.A1.7.7
Cowley, Aidan	CA	IAC-18.A3.2C.3
Cowley, Aidan	CA	IAC-18.A3.2C.4
Cowley, Aidan	CA	IAC-18.A3.2C.6
Cox, Andrew	CA	IAC-18.C1.8.9
Crable, Vicki	CA	IAC-18.B3.1.8
Craifaleanu, Andrei	CA	IAC-18.E4.1.9
Cramarossa, Augusto	CA	IAC-18.E3.3.5
Crane, Keith	CA	IAC-18.E6.1.11
Crane, Keith	CA	IAC-18.E3.3.9
Crassidis, John	CA	IAC-18.C1.3.3
Craven, Paul	CA	IAC-18.C2.6.2
Crawford, Caitlin	CA	IAC-18.B3.5.6
Crawley, Edward	CA	IAC-18.B2.1.7
Crawley, Edward	CA	IAC-18.B3.2.9
Crawley, Edward	CA	IAC-18.D1.4A.8
Creasey, Jeremy	CA	IAC-18.D6.1.1
Creech, Jessica	CA	IAC-18.A1.IP.40
Creech, Jessica	CA	IAC-18.B3.IP.14
Creech, Steve	CA	IAC-18.D2.1.4
Creech, Steve	CA	IAC-18.B4.5.8
Creech, Steve	A	IAC-18.D2.8-A5.4.1
Crema, Matteo	CA	IAC-18.D4.1.8
Crema, Matteo	CA	IAC-18.A5.1.5
Cremer, Jan	CA	IAC-18.B4.6A.8
Crespo, Juny	CA	IAC-18.B4.5.10
Crespo, Juny	CA	IAC-18.A2.IP.10
Cresto Aleina, Sara	CA	IAC-18.D1.4A.7
Crisconio, Marino	CA	IAC-18.A3.1.1
Crisconio, Marino	CA	IAC-18.B3.7.7
Crisp, Nicholas H.	A	IAC-18.B4.2.2
Crisp, Nicholas H.	CA	IAC-18.C4.6.4
CRIVELLARI, Gianni	CA	IAC-18.D5.2.6
Crivellari, Gianni	CA	IAC-18.E1.5.11
Crivellari, Gianni	CA	IAC-18.D1.5.3
Croell, Arne	CA	IAC-18.A2.2.17
Cropp, Alexander	CA	IAC-18.C1.5.10
Cropp, Alexander	CA	IAC-18.C1.IP.38
Cropp, Alexander	CA	IAC-18.A7.3.2
Crosby, Kevin	A	IAC-18.C4.3.15
Cross, Christina	CA	IAC-18.A2.IP.3
Cross, Victoria	CA	IAC-18.A2.IP.3
Crusan, Jason	A	IAC-18.A5.1.1
Crusan, Jason	A	IAC-18.E1.7.1
Crébassol, Philippe	CA	IAC-18.B1.1.4
Csoke, Antal	CA	IAC-18.A1.5.11
Cuciniello, Giovanni	CA	IAC-18.D1.3.3
Cuellar, Angel	A	IAC-18.E3.IP.5
Cui, Hong	CA	IAC-18.A1.3.17
Cui, Hong	CA	IAC-18.C2.4.9
Cui, Pingyuan	CA	IAC-18.C1.3.6
Cui, Pingyuan	CA	IAC-18.D2.3.5
CUI, YANZHE	CA	IAC-18.B4.7.4
Cui, Yufu	A	IAC-18.B1.1.8
Cullen, David	CA	IAC-18.E2.3-GTS.4.5
Cullen, David	CA	IAC-18.B4.8.10
Cummings, Alex	CA	IAC-18.C4.7-C3.5.3
Cummings, Alex	CA	IAC-18.C4.7-C3.5.10
Cummings, Laura	CA	IAC-18.A7.1.3
Cunill, Jordi	CA	IAC-18.E2.3-GTS.4.11
Cunin, Solange	CA	IAC-18.E1.IP.4
Cunningham, Jennifer	CA	IAC-18.E1.9.14
Curianò, Federico	CA	IAC-18.A6.9.8
Curianò, Federico	CA	IAC-18.A6.IP.4
Curianò, Federico	CA	IAC-18.A6.IP.36
Curianò, Federico	CA	IAC-18.A6.10-C1.7.9
Curianò, Federico	CA	IAC-18.B4.6B.10
Curti, Fabio	CA	IAC-18.D1.3.6
Curti, Fabio	CA	IAC-18.C1.IP.19
Cutajar, Denis	A	IAC-18.A6.1.9
Cutajar, Denis	CA	IAC-18.A6.IP.10
Cutler, James	CA	IAC-18.B4.2.9
Cwik, Tom	A	IAC-18.A7.3.4
Czapski, Paweł	A	IAC-18.B5.1.9
Czupalla, Markus	CA	IAC-18.A1.6.12
Câmara, Francisco	CA	IAC-18.A3.3B.7

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Name	Role	Paper
D'Angelo, Olivier	CA	IAC-18.C2.9.7
D'Auria, Ilaria	CA	IAC-18.E3.3.5
D'Errico, Marco	CA	IAC-18.C1.6.12
D'Errico, Marco	CA	IAC-18.B4.7.11
D'Hendecourt, Louis	CA	IAC-18.A1.6.8
D'Orgeville, Celine	CA	IAC-18.A6.6.3
D'Ottavio, Andrea	CA	IAC-18.B6.3.6
D'Silva, Oneil	CA	IAC-18.B3.4-B6.4.11
D. Camba, Jorge	CA	IAC-18.D4.1.7

da Costa, Rodrigo	A	IAC-18.B2.5.1
Da Fonseca, Ijar	CA	IAC-18.C2.1.4
Da Fonseca, Ijar	A	IAC-18.C2.2.5
Da Fonseca, Ijar	CA	IAC-18.C2.3.7
Da Fonseca, Ijar	CA	IAC-18.C2.IP.9
da Silva Curiel, Alex	CA	IAC-18.B4.6A.1
da Silva Curiel, Alex	CA	IAC-18.B4.9-GTS.5.1
da Silva Pais Cabral, Francisco	CA	IAC-18.B6.2.11
Da-Poian, Victoria	CA	IAC-18.D1.1.8
Dachev, Tsvetan	CA	IAC-18.A1.5.9
Dachwald, Bernd	CA	IAC-18.A1.6.12
Dachwald, Bernd	CA	IAC-18.A3.4B.6
Dafnis, Athanasios	CA	IAC-18.C2.5.13
Dahal, Chiranjivi	CA	IAC-18.B2.8-GTS.3.6
Dahmen, Ulrich	CA	IAC-18.D1.IP.6
Dahunsi, Olurotimi	CA	IAC-18.B4.1.7
Dai, Kun	CA	IAC-18.E5.2.3
Dai, Shuwu	CA	IAC-18.A7.2.1
Dai, Wei	A	IAC-18.D3.IP.8
Dai, Zhongquan	CA	IAC-18.A1.3.4
Daibo, Toshiaki	CA	IAC-18.D2.2.1
DalBello, Richard	CA	IAC-18.B3.2.12
Dali, Liu	A	IAC-18.C2.9.13
Dalla Vedova, Florio	CA	IAC-18.A6.2.10
Dalla Vedova, Florio	CA	IAC-18.A6.4.6
Damann, Volker	CA	IAC-18.B3.9-GTS.2.12
Dammann, Armin	CA	IAC-18.A3.2A.8
Danaila, Sterian	A	IAC-18.C4.9.12
Danelon, Christophe	CA	IAC-18.A1.6.3
Danet, Brieuc	CA	IAC-18.D2.7.8
Danet, Brieuc	CA	IAC-18.D1.4B.12
Dang, Hongxing	CA	IAC-18.B1.IP.12
Danieli, Mattia	CA	IAC-18.E7.IP.6
Danilova, Mariya	CA	IAC-18.A3.1.1
Danilova, Mariya	A	IAC-18.A3.1.7
Danilova, Mariya	CA	IAC-18.A3.IP.35
Dannemann, Frank	CA	IAC-18.D1.1.1
Dannemann, Frank	A	IAC-18.B4.6A.6
Dannemiller, Karen	A	IAC-18.A2.7.13
Dannenberg, Kristine	A	IAC-18.B5.1.2
Dannenberg, Kristine	A	IAC-18.E1.IP.27
Dano, Marie-Laure	CA	IAC-18.C2.6.4
Dansberry, Bryan	CA	IAC-18.B3.3.3
Danziger, Björn	A	IAC-18.B5.3.9
Dao, Linda	A	IAC-18.B3.9-GTS.2.12
Daoud-Moraru, Anthonius	CA	IAC-18.C1.5.10
Daraio, Maria girolamo	CA	IAC-18.B1.1.11
Darkow, Nicolas	A	IAC-18.C4.5.15
Darkow, Nicolas	CA	IAC-18.C4.10.9
Dartois, Emmanuel	CA	IAC-18.A1.6.8
Das-Stuart, Ashwati	CA	IAC-18.D1.4A.6
Das-Stuart, Ashwati	A	IAC-18.C1.9.1
Dasgupta, Upasana	A	IAC-18.E7.1.15
Dashdondog, Erdenebaatar	A	IAC-18.B4.1.9
Daton-Lovett, Andrew	CA	IAC-18.C3.4.5
Daub, Dennis	A	IAC-18.C2.IP.1
Daurskikh, Anna	CA	IAC-18.D3.3.7
Daurskikh, Anna	A	IAC-18.C2.9.9
Dave, Pratik	A	IAC-18.B4.3.10
Davendralingam, Navindran	CA	IAC-18.D1.4B.10
Davenport, Robert	CA	IAC-18.D3.3.7
Davidian, Ken	A	IAC-18.E6.2.4
Davidian, Ken	A	IAC-18.E6.3.8
Davidová, Lucie	CA	IAC-18.B6.3.4
Davidson, Mark	CA	IAC-18.B4.2.2
Davies, Philip	A	IAC-18.B4.5.9
Davis, Michael	CA	IAC-18.E1.7.14
de Angelis, Emanuele Luigi	CA	IAC-18.C1.3.4
De Angelis, Massimo	A	IAC-18.E3.6.5
De Antonio, Emeline	A	IAC-18.D4.5.4
De Antonio, Emeline	CA	IAC-18.D4.5.18
de Athayde Costa e Silva, Marsil	CA	IAC-18.C4.8-B4.5A.6
De Blasio, Gianmario	CA	IAC-18.D4.4.5
de Bruijn, Ferdi	CA	IAC-18.C1.3.7
de Bruijn, Ferdi	CA	IAC-18.C1.IP.33
De Francesco, Sara	CA	IAC-18.E1.3.6
De Gasperis, Simone	CA	IAC-18.D1.IP.5
de Jong, Sybren	CA	IAC-18.B1.3.1
De La Torre, Andrea	CA	IAC-18.A1.3.16
De La Torre, Andrea	CA	IAC-18.B3.9-GTS.2.5
De La Torre, Andrea	CA	IAC-18.A1.IP.40
De la Torre, Gabriel G.	A	IAC-18.A4.2.4
De la Torre, Rosa	CA	IAC-18.A1.6.12
de Leon, Pablo	A	IAC-18.E4.1.11
De Leon, Pablo	CA	IAC-18.A1.7.11
De Maestri, Maria Elena	A	IAC-18.E7.3.1
De Maio, Andrea	CA	IAC-18.D1.2.7
De Marco, Greta	A	IAC-18.C1.IP.22
De Matteis, Guido	CA	IAC-18.C1.4.5
De Mey, Stefaan	CA	IAC-18.A3.1.1
De Mey, Stefaan	CA	IAC-18.A3.1.10
De Micco, Veronica	CA	IAC-18.E1.3.6
de Neufville, Richard	CA	IAC-18.B3.2.9
de Oliveira, Élcio Jeronimo	A	IAC-18.C2.1.4
de Oliveira, Élcio Jeronimo	CA	IAC-18.C2.2.5
de Oliveira, Élcio Jeronimo	A	IAC-18.C2.3.8
DE OLIVEIRA BITTENCOURT NETO, OLAVO	CA	IAC-18.E3.4.12
De Parolis, Martina Natalina	CA	IAC-18.A2.1.4
De Pascale, Stefania	CA	IAC-18.E1.3.6
De Paula, Ramon P.	A	IAC-18.A3.3A.1
de Paulis, Daniela	A	IAC-18.E5.3.11
de Paulis, Daniela	A	IAC-18.A4.IP.3
De Quattro, Nicola	CA	IAC-18.A3.IP.7
de Raucourt, Sébastien	CA	IAC-18.A3.3B.5
De Rosa, Diego	CA	IAC-18.A3.2A.3
De Rose, Francesco	A	IAC-18.D3.4.13
de Ruiter, Anton	CA	IAC-18.C1.2.11
De Smet, Stijn	A	IAC-18.C1.1.8
De Stefano, Marco	CA	IAC-18.D1.6.10
De Tata, Marco	A	IAC-18.B2.1.2
de Vera, Jean-Pierre Paul	A	IAC-18.A1.6.12
De Vita, Alessandro	CA	IAC-18.A2.5.11
de Vries, Johan	CA	IAC-18.B1.3.1
de Vries, Johan	A	IAC-18.B1.5.1
de Weck, Olivier	CA	IAC-18.B1.1.2
de Wilde, Don	CA	IAC-18.A6.3.9
de Windt, Aaron	CA	IAC-18.D2.6.5
De Zaiacomo, Gabriele	CA	IAC-18.A3.3A.5
De Zanet, Gianluca	CA	IAC-18.C2.6.5
Dean, Bryan	CA	IAC-18.B1.1.6
Debas, Gilles	CA	IAC-18.D2.1.2
Debus, André	CA	IAC-18.A3.3B.10
Decadi, Aline	A	IAC-18.B3.9-GTS.2.10
Decadi, Aline	A	IAC-18.D2.9-D6.2.1
DeChurch, Leslie	CA	IAC-18.A1.1.4
Deconinck, Florian	CA	IAC-18.B4.9-GTS.5.8
Decoopman, Clementine	CA	IAC-18.E1.IP.9
Dedieu, Gerard	CA	IAC-18.B1.1.4
Deeken, Jan	A	IAC-18.C4.1.13
Deffacis, Maurizio	A	IAC-18.B6.3.5
Degremont, Joel	CA	IAC-18.B1.1.12
Dehais, Frederic	CA	IAC-18.B3.6-A5.3.7
Dei Tos, Diogene Alessandro	CA	IAC-18.A3.2A.7
Dei Tos, Diogene Alessandro	CA	IAC-18.B4.8.5
Dei Tos, Diogene Alessandro	A	IAC-18.C1.8.11
Deiml, Michael	A	IAC-18.B1.3.4
Deiml, Michael	CA	IAC-18.A1.6.2
Del Bianco, Alberto	CA	IAC-18.D6.3.4
Del Guercio, Daniele	CA	IAC-18.D3.IP.7
Del Mastro, Antonio	CA	IAC-18.B3.9-GTS.2.11
Del Mastro, Antonio	A	IAC-18.A3.IP.69
del Portillo, Inigo	A	IAC-18.B2.1.7
Del Rio Vera, Jorge	CA	IAC-18.E3.1.3
Delande, Pauline	A	IAC-18.E2.3-GTS.4.2
Delande, Pauline	CA	IAC-18.E2.3-GTS.4.4
Delande, Pauline	CA	IAC-18.A5.1.5
DeLatte, Danielle	A	IAC-18.D3.1.2
Delaurentis, Daniel	CA	IAC-18.D1.4A.6
Delaurentis, Daniel	CA	IAC-18.D1.4B.10
Delauré, Bavo	CA	IAC-18.B4.4.7
Delayat, Vincent	CA	IAC-18.E5.4.9
Deleflie, Florent	CA	IAC-18.A6.9.2
Deleflie, Florent	CA	IAC-18.A6.9.5
Delfini, Andrea	A	IAC-18.C2.IP.19
Delfini, Andrea	A	IAC-18.C2.8.1
Deliz, Ivy	CA	IAC-18.B3.4-B6.4.6
Dell'Elce, Lamberto	CA	IAC-18.C1.9.4
Della Corte, Vincenzo	CA	IAC-18.A3.5.4
Della-Rosa, Irina	CA	IAC-18.A1.1.3
Dellandrea, Brice	CA	IAC-18.A6.5.6
Delovski, Toni	CA	IAC-18.D1.4B.7
Delpech, Michel	CA	IAC-18.A3.3B.10
Delpech, Michel	CA	IAC-18.B3.6-A5.3.3
DeLuna, Alan T.	CA	IAC-18.B3.4-B6.4.8
Demarco, Rossana	CA	IAC-18.A7.3.1
Deme, Sandor	CA	IAC-18.A1.5.11
Demertzi, Athena	CA	IAC-18.A1.2.14
Demets, René	CA	IAC-18.A1.6.2
Demidovich, Nickolas	A	IAC-18.D6.1.8
Demin, Artem	CA	IAC-18.A1.4.9
Demirci, Tunahan	CA	IAC-18.A2.7.8
Demitri, Christian	A	IAC-18.C3.IP.2
Dempster, Andrew G.	CA	IAC-18.C1.IP.5
DENARO, ANGELO	A	IAC-18.D2.3.11
DeNeen, Mathew	CA	IAC-18.B6.1.3
Deng, Fan	A	IAC-18.D2.6.9
Deng, Hui	CA	IAC-18.B2.8-GTS.3.2
Deng, Songbo	A	IAC-18.C2.IP.27
Dengra Moya, Felipe Juan	A	IAC-18.C4.10.8
Denis, Amandine	CA	IAC-18.A6.5.2
Denis, Gil	A	IAC-18.E6.3.7
Denise, Pierre	CA	IAC-18.A1.4.19
Denk, Thorsten	A	IAC-18.D3.3.8
Denner, Francois	A	IAC-18.E3.3.6
Denning, Kathryn	CA	IAC-18.A4.2.2
Dentis, Matteo	A	IAC-18.C1.4.9
Deodhar, Akshay	CA	IAC-18.E2.4.10
Deppner, Christian	CA	IAC-18.A2.1.11
Derechin, Alexander G.	A	IAC-18.B3.2.2
Derkachev, Aleksey	CA	IAC-18.C4.4.11
Deschamps, Lucien	CA	IAC-18.A3.IP.13
Deshmukh, Meenakshi	CA	IAC-18.D1.4A.3
Deshmukh, Meenakshi	CA	IAC-18.D1.4B.8
Destic, Fabien	CA	IAC-18.E2.4.4
Detera, Bernadette Joy	A	IAC-18.B3.9-GTS.2.3
Determann, Benedikt	A	IAC-18.C4.IP.35
Detrell, Gisela	A	IAC-18.E1.3.8
Detrell, Gisela	CA	IAC-18.A1.7.4
Detrell, Gisela	A	IAC-18.A1.7.6
Detsis, Emmanouil	A	IAC-18.B3.7.5
Dettmann, Nico	CA	IAC-18.B3.1.1
Dhital, Bal	CA	IAC-18.E1.4.7
Dhital, Bal	CA	IAC-18.A1.IP.40
Dhital, Narayan	A	IAC-18.B2.4.3
Di Carlo, Marilena	CA	IAC-18.A5.1.6
Di Carlo, Marilena	CA	IAC-18.C1.8.5
di Ciaccio, Simona	A	IAC-18.E3.1.10
Di Lizia, Pierluigi	CA	IAC-18.A6.1.9
Di Lizia, Pierluigi	CA	IAC-18.A3.2A.7
Di Lizia, Pierluigi	CA	IAC-18.A6.2.10
Di Lizia, Pierluigi	CA	IAC-18.E2.1.7
Di Lizia, Pierluigi	CA	IAC-18.C1.6.13
Di Lizia, Pierluigi	CA	IAC-18.A6.IP.10
Di Lizia, Pierluigi	CA	IAC-18.A6.IP.41
Di Lizia, Pierluigi	CA	IAC-18.A6.7.7
Di Lizia, Pierluigi	CA	IAC-18.B4.8.5
Di Lizia, Pierluigi	CA	IAC-18.C1.9.13
Di Martino, Giuseppe	CA	IAC-18.C2.4.4
Di Martino, Giuseppe	A	IAC-18.C4.3.6
Di Pasquale, Peter	CA	IAC-18.B4.3.4
Di Pippo, Simonetta	CA	IAC-18.E3.1.3
Di Pippo, Simonetta	CA	IAC-18.B3.3.2
Di Pippo, Simonetta	CA	IAC-18.B1.5.2
Di Roberto, Riccardo	CA	IAC-18.A6.IP.1
Di Salvo, Tiziana	CA	IAC-18.B4.2.11
Di Stefano, Ivan	CA	IAC-18.D1.IP.5
Di Tana, Valerio	A	IAC-18.B4.8.1
Di Vita, Gandolfo	A	IAC-18.C2.1.11
Dian, Li	CA	IAC-18.B2.4.7
Dian, Li	CA	IAC-18.B3.7.11
Dias, Roger D.	CA	IAC-18.A1.3.5
Diaz, Alejandro	CA	IAC-18.B3.4-B6.4.10
Diaz de Cerio Goenaga, Rainer	CA	IAC-18.A3.IP.7
Diaz Lopez, Olga	A	IAC-18.D2.6.4
Diaz Pulido, Flor	CA	IAC-18.B2.4.1
Diaz Pulido, Flor	CA	IAC-18.B2.5.2
Diedrich, Thomas	CA	IAC-18.A3.2A.3
Diefenbach, Angelika	CA	IAC-18.A2.6.11
Dierken, Christian	CA	IAC-18.C4.IP.1
Dierker, Skylar	CA	IAC-18.D2.8-A5.4.4
Dietsche, Alex	CA	IAC-18.D3.3.10
Dietze, Claudia	CA	IAC-18.C1.IP.25
Dietzel, Roswitha	CA	IAC-18.A1.4.8
Dietzel, Roswitha	A	IAC-18.A1.4.10
Diez, Eduard	CA	IAC-18.D2.7.8
Diez, Eduard	CA	IAC-18.B4.5.12
Diez, Hubert	CA	IAC-18.D1.2.6
Diez, Hubert	A	IAC-18.E1.5.5
Dinc, Ebru	CA	IAC-18.E2.3-GTS.4.9
Ding, Dandan	A	IAC-18.D2.9-D6.2.7
Ding, Jie	CA	IAC-18.B5.3.5
Ding, Maxwell	CA	IAC-18.E1.4.7
Ding, Rui	A	IAC-18.B2.3.7
Ding, Suquan	A	IAC-18.B3.IP.8
Dinges, David	CA	IAC-18.A1.1.7
Dinges, David	CA	IAC-18.A1.2.13
Dinges, David	CA	IAC-18.A1.4.19
Dini, Luigi	CA	IAC-18.B1.1.11
Dini, Luigi	CA	IAC-18.B1.2.13
Dionisio, Cesare	CA	IAC-18.C1.3.5
Diprima, Francesco	A	IAC-18.A6.1.8
Dissanayake, Asoka	CA	IAC-18.B2.1.5
Distante, Alessandro	CA	IAC-18.A1.3.10
Dittus, Hansjörg	CA	IAC-18.B3.9-GTS.2.2
Divsalar, Donya Naz	A	IAC-18.E1.6.5
Dixit, Devarrishi	A	IAC-18.A4.IP.6
Dixon, Jordan	A	IAC-18.A1.2.19
Djamane, Fawzi	CA	IAC-18.B4.3.5
Djojodihardjo, Harijono	A	IAC-18.C2.3.2
Djojodihardjo, Harijono	A	IAC-18.C4.6.9
Dobrovolny, Stefan	CA	IAC-18.A1.4.5
Dochow, Sebastian	A	IAC-18.B3.IP.9
DODI, Daniel	CA	IAC-18.D5.2.6
Doering, Wolfgang	CA	IAC-18.A1.IP.3
Doermer, Manfred	CA	IAC-18.D3.2.12
Doermer, Manfred	CA	IAC-18.D3.IP.2
Dohkojima, Tomokazu	A	IAC-18.A2.7.7
Doki, Shotaro	CA	IAC-18.A1.1.6
Dolado Perez, Juan Carlos	CA	IAC-18.A6.9.3
Dolch, Michael	CA	IAC-18.A1.3.20
Doldirina, Catherine	A	IAC-18.E7.3.2
Doldirina, Catherine	A	IAC-18.A6.8.2
Dolmans, Sharon	CA	IAC-18.D5.2.8
Dombrovsky, Leonid	CA	IAC-18.C2.7.4
Dominoni, Annalisa	A	IAC-18.E1.7.10
Domjahn, Karl	A	IAC-18.C2.1.12
Domínguez, Raúl	CA	IAC-18.D1.2.7
Domínguez, Rosa María	CA	IAC-18.B4.2.2
Domínguez, Rosa María	CA	IAC-18.C4.6.4
Donati, Alessandro	CA	IAC-18.A1.6.5
Donati, Alessandro	CA	IAC-18.B3.6-A5.3.3
Dong, Shihan	CA	IAC-18.D2.8-A5.4.11
Dong, Wenbo	CA	IAC-18.D1.3.8
Dong, YAO	CA	IAC-18.C4.IP.40
Dong, YAO	CA	IAC-18.C4.IP.56
Donitz, Benjamin	CA	IAC-18.E2.3-GTS.4.6
Donner, Amanda	A	IAC-18.B4.3.4
Doornink, Jan	A	IAC-18.B1.3.1
Doppelmayr, Michael	CA	IAC-18.A1.4.20

Dorji, Cheki	A	IAC-18.E5.4.7
Dorrington, Scott	A	IAC-18.D4.5.15
dos Reis Raimundi, Lucas	CA	IAC-18.D1.IP.12
Dos Santos, Walter Abrahão	A	IAC-18.E1.8.1
Dos Santos, Walter Abrahão	A	IAC-18.E2.4.9
Dotsenko, Oleg	A	IAC-18.C2.6.7
Doubek, Jiri	A	IAC-18.B2.IP.16
Doucet, Gilles	A	IAC-18.E7.7-B3.8.8
Doucette, Peter	A	IAC-18.B1.2.10
Doucette, Peter	A	IAC-18.B1.4.5
Dougherty, Kerrie	A	IAC-18.E5.5.5
Dougherty, Kerrie	A	IAC-18.E4.3B.11
Dousset, Vincent	CA	IAC-18.A1.2.14
Doyle, Thomas	CA	IAC-18.A1.3.5
Dragoni, Matteo	CA	IAC-18.D4.1.8
Dragoni, Matteo	CA	IAC-18.A5.1.5
Dragoni, Matteo	CA	IAC-18.B4.7.9
Drake, Bret	CA	IAC-18.A3.1.3
Drake, Bret	CA	IAC-18.D1.1.5
Drass, Holger	CA	IAC-18.E1.IP.21
Drescher, Uwe	CA	IAC-18.A1.2.7
Drescher, Uwe	CA	IAC-18.A1.2.8
Dreus, Andrii	CA	IAC-18.A6.IP.39
Dreyer, Michael	A	IAC-18.A2.3.1
Dreyer, Michael	CA	IAC-18.A2.3.2
Driebe, Thomas	CA	IAC-18.A2.7.18
Driedger, Matthew	CA	IAC-18.A1.6.6
Drimaco, Daniela	CA	IAC-18.A6.1.8
Drimaco, Daniela	CA	IAC-18.B5.1.7
Drimaco, Daniela	CA	IAC-18.B6.3.9
Drimaco, Daniela	CA	IAC-18.B1.IP.36
Drimaco, Daniela	CA	IAC-18.A7.3.1
Drimaco, Daniela	A	IAC-18.B1.4.9
Drolshagen, Gerhard	CA	IAC-18.A6.3.5
Dron, Mykola	A	IAC-18.A6.IP.39
Dron', Mykola	CA	IAC-18.C4.8-B4.5A.13
Drouet, Maria	A	IAC-18.B2.6.4
Du, Hui	A	IAC-18.E3.1.3
Du, Pengfei	CA	IAC-18.D2.5.8
Du, Wang-Fang	CA	IAC-18.A2.2.10
Du, Wang-Fang	A	IAC-18.A2.4.6
du Roy, Guillaume	CA	IAC-18.A5.1.5
Duan, Anna	CA	IAC-18.D2.5.11
Duan, Kang	A	IAC-18.E7.4.12
Duan, Kang	A	IAC-18.E7.7-B3.8.14
DUAN, Li	A	IAC-18.A2.2.5
Dubanchet, Vincent	CA	IAC-18.D1.3.1
Dubernet, Gabriel	CA	IAC-18.D1.3.5
Dubert, Diana	CA	IAC-18.B5.1.11
Dubert, Diana	CA	IAC-18.A2.2.8
Dubert, Diana	CA	IAC-18.A2.4.5
Dubois, Fabian	A	IAC-18.A3.IP.23
Dubois, Frank	CA	IAC-18.A2.4.7
Dubois, Louis	A	IAC-18.A3.IP.19
Dubois-Matra, Olivier	CA	IAC-18.C1.IP.3
Dudukin, Alexandr	CA	IAC-18.A1.IP.14
Dudzinska, Joanna	CA	IAC-18.A1.1.13
Dueck, Andreas	CA	IAC-18.C2.1.8
Dueck, Andreas	CA	IAC-18.D1.2.12
Duerfeld, Kai	CA	IAC-18.E1.6.11
Duesmann, Berthyl	CA	IAC-18.B1.1.9
Duesmann, Berthyl	CA	IAC-18.C1.IP.25
Duffard, Rene	CA	IAC-18.A7.3.7
Duggan, Matthew	A	IAC-18.B3.9-GTS.2.6
Duke, Richard	CA	IAC-18.B4.3.5
Duke, Richard	CA	IAC-18.A6.5.2
Duke, Richard	CA	IAC-18.C3.4.5
Dumas, Guillaume	CA	IAC-18.A4.IP.3
Dumitrescu, Adrian	CA	IAC-18.C2.9.3
Dumke, Michael	CA	IAC-18.B4.6A.8
Dumont, Etienne	CA	IAC-18.D2.4.1
Dumont, Etienne	CA	IAC-18.D2.6.3
Dumont, Etienne	CA	IAC-18.A3.4B.6
Dunglas, Jean	CA	IAC-18.A3.IP.13
Dunham, David	A	IAC-18.A5.2.2
Dunstan, Martin	CA	IAC-18.D1.3.4
Dupas, Michel	CA	IAC-18.C4.10.13
DUPONT, CEDRIC	CA	IAC-18.D2.7.8
DUPONT, CEDRIC	CA	IAC-18.B4.5.12
Dupont, Cedric	A	IAC-18.A6.6.1
Dupont, Cedric	A	IAC-18.D1.4B.12
Durand-Carrier, Franck	CA	IAC-18.D5.2.6
Durand-Carrier, Franck	CA	IAC-18.E1.5.11
Durand-Carrier, Franck	CA	IAC-18.D1.5.3
Durand-Carrier, Franck	CA	IAC-18.D1.5.4
Durbin, Liam	CA	IAC-18.D1.4A.6
Durikovič, Roman	CA	IAC-18.A6.IP.6
Durrani, Daniyal Ahmad	CA	IAC-18.E2.3-GTS.4.5
Durst, Steve	A	IAC-18.A3.2B.5
Durst, Steve	CA	IAC-18.A3.2B.6
Duru, Adil Deniz	CA	IAC-18.A1.IP.29
Durán, Cintia	A	IAC-18.E1.IP.18
Dushin, Vladislav	CA	IAC-18.A2.2.4
Dussardier, Guillaume	CA	IAC-18.C2.1.11
Dussy, Stephane	CA	IAC-18.D2.3.4
Dutta Choudhury, Kaustav	CA	IAC-18.A1.IP.20
Dutta Choudhury, Kaustav	A	IAC-18.A3.IP.67
Duveiller, Florence	A	IAC-18.C1.IP.10
Dwa, Manisha	CA	IAC-18.B2.4.3
Dwa, Manisha	A	IAC-18.E1.5.12
Dwa, Manisha	CA	IAC-18.A3.IP.66
Dyakonov, Grigoriy	CA	IAC-18.C4.4.11
Dyatkov, Sergey	CA	IAC-18.E2.4.8
Dyer, Alex	CA	IAC-18.B1.3.10
Dyer, Alex	CA	IAC-18.C3.4.5
Dymchenko, Artem	CA	IAC-18.B2.3.6
Dzamba, Tom	CA	IAC-18.A3.2B.6
Dziura, Martin	CA	IAC-18.D4.3.7
Dziura, Martin	A	IAC-18.B4.6B.8
Díaz-Torrejón, Cesar	CA	IAC-18.B1.4.10
Díaz Carrasquer, Albert Josep	CA	IAC-18.E2.3-GTS.4.11
Döringshoff, Klaus	CA	IAC-18.A2.1.7
Döringshoff, Klaus	CA	IAC-18.A2.1.8
Döringshoff, Klaus	A	IAC-18.A2.1.9
Döringshoff, Klaus	CA	IAC-18.A2.3.5
Dąbrowski, Adam	A	IAC-18.E1.IP.15
D'Argento, Dennis	CA	IAC-18.B4.1.10

E

Name	Role	Paper
Eastwood, Jonathan	CA	IAC-18.A1.5.2
Ebert, Florian	CA	IAC-18.A3.2B.10
Ebert, Monica	A	IAC-18.A7.1.6
Ebert, Monica	CA	IAC-18.E1.8.4
Ebert, Monica	CA	IAC-18.E1.IP.30
Ebert, Monica	CA	IAC-18.E1.IP.36
Ebert, Monica	A	IAC-18.E1.9.6
Ebert, Monica	CA	IAC-18.E8.1.2
Ebright, Kayla	CA	IAC-18.A6.2.9
Eccles, David	CA	IAC-18.E1.4.7
Echigo, Kazuya	A	IAC-18.C1.IP.34
Eckardt, Andreas	CA	IAC-18.B1.5.10
Eckardt, Frank	CA	IAC-18.E5.2.9
Ecker, Tobias	CA	IAC-18.D2.6.3
Eckersley, Steve	A	IAC-18.B4.6A.1
Eckert, Kerstin	A	IAC-18.A2.2.15
Eckert, Kerstin	CA	IAC-18.A2.4.12
Edhlund, Isabelle	CA	IAC-18.B3.4-B6.4.6
Edmondson, Steve	CA	IAC-18.B4.2.2
Edmondson, Steve	CA	IAC-18.C4.6.4
Edmundson, Perry	CA	IAC-18.A3.2B.6
Efendiev, Magomed	CA	IAC-18.D1.IP.3
Eftenaru, Daniela-Andreea	CA	IAC-18.A3.IP.54
Egbers, Christoph	CA	IAC-18.A2.4.8
Egbers, Christoph	CA	IAC-18.A2.6.15
Egbers, Christoph	CA	IAC-18.A2.7.18
Eger, Christian	A	IAC-18.D2.6.10
Egli, Marcel	CA	IAC-18.A1.8.8
Egron, Elise	CA	IAC-18.A4.1.9
Ehresmann, Manfred	CA	IAC-18.E2.3-GTS.4.1
Ehresmann, Manfred	A	IAC-18.B4.6A.12
Ehresmann, Manfred	CA	IAC-18.A2.IP.15
Ehresmann, Manfred	A	IAC-18.D2.IP.16
Ehrpais, Hendrik	CA	IAC-18.B1.3.6
Ehsan, Negar	CA	IAC-18.A7.3.8
Eichler, Peter	CA	IAC-18.B3.2.10
Eickhoff, Jens	CA	IAC-18.B4.3.2
Eigenbrod, Christian	CA	IAC-18.A2.2.7
Eigenbrod, Christian	CA	IAC-18.A2.5.1
Eigenbrod, Christian	A	IAC-18.D5.3.10
Eisenberg, Till	A	IAC-18.A1.3.3
Eisenberg, Till	CA	IAC-18.A1.3.9
Eisenberg, Till	A	IAC-18.B3.7.8
Ekal, Monica	CA	IAC-18.D1.6.7
El-Athman, Rukeia	CA	IAC-18.A1.4.16
El-Nimri, Salem	CA	IAC-18.B2.1.5
Elahi, Hassan	A	IAC-18.C2.5.3
Elayaperumal, Ezhilrajan	CA	IAC-18.C4.5.4
Eldholm, Mari Amanda	A	IAC-18.E7.IP.9
Elenin, Leonid	CA	IAC-18.A6.IP.8
Elhussein, Amr	A	IAC-18.C2.1.13
ELIA, Gianpaolo	CA	IAC-18.A5.2.11
Elimelech, Avichai	A	IAC-18.C4.1.6
Elimelech, Avichai	CA	IAC-18.A3.2A.5
Elliott, John	A	IAC-18.A4.2.2
Elliott, Robert	A	IAC-18.D5.3.8
Elsaesser, Andreas	CA	IAC-18.A1.6.2
Elsaesser, Andreas	A	IAC-18.A1.6.3
Elsaesser, Andreas	CA	IAC-18.A1.6.8
Elsaesser, Andreas	CA	IAC-18.A1.6.12
Elsen, Michael	A	IAC-18.A2.3.5
Elsen, Michael	CA	IAC-18.B3.9-GTS.2.10
Elvezio, Carmine	CA	IAC-18.B3.7.6
Elvis, Martin	A	IAC-18.E3.2.7
Elvis, Martin	A	IAC-18.D4.5.17
Emami, M. Reza	CA	IAC-18.A3.IP.65
Emanuelsen, William	CA	IAC-18.D2.1.6
Emelianov, Sergey	CA	IAC-18.E1.7.5
Emley, Benjamin	A	IAC-18.C3.IP.13
Enderle, Werner	CA	IAC-18.B2.5.5
Endler, Stephan	CA	IAC-18.C2.2.4
Engelhart, Daniel	A	IAC-18.A6.IP.40
Engler, Simon	A	IAC-18.C3.4.7
Enrico, Michael	CA	IAC-18.B2.7.2
Enriquez, J. Emilio	A	IAC-18.A4.1.1
Enriquez, J. Emilio	CA	IAC-18.A4.1.9
Entrena Utrilla, Carlos Manuel	CA	IAC-18.D4.5.18
Epenoy, Richard	CA	IAC-18.C1.8.5
Epenoy, Richard	A	IAC-18.C1.8.6
ERDEM, Merve	CA	IAC-18.E7.4.1
Erhard, Markus	CA	IAC-18.B1.3.4
Eriksen, Torkild	CA	IAC-18.B4.4.2
Erinfolami, Funmilayo	CA	IAC-18.B5.2.1
Erinfolami, Funmilayo	CA	IAC-18.E7.5.11
Ernst, Florian	CA	IAC-18.B6.2.5
Escobar Antón, Diego	CA	IAC-18.A6.9.9
Escobari Vargas, Paola Andrea	A	IAC-18.B2.7.11
Escudier, Benedicte	CA	IAC-18.E2.4.4
Esnoz-Larraya, Judit	CA	IAC-18.D3.2.12
Esnoz-Larraya, Judit	CA	IAC-18.D3.IP.2
Esposito, Marco	CA	IAC-18.B4.4.7
Esposito, Marco	CA	IAC-18.D3.3.11
Esposito, Marco	CA	IAC-18.A3.4B.4
Esser, Burkard	CA	IAC-18.C2.IP.1
Estable, Stéphane	A	IAC-18.A6.6.10
Esteves, David	CA	IAC-18.A3.3B.7
Esther, Elizabeth	A	IAC-18.B4.5.15
Estébanez Camarena, Mónica	A	IAC-18.B4.4.11
Estébanez Camarena, Mónica	A	IAC-18.B2.IP.20
Estébanez Camarena, Mónica	CA	IAC-18.C1.IP.20
Ettori, Marc-Julien	CA	IAC-18.A2.1.4
Eugeni, Marco	CA	IAC-18.C2.5.3
Eugeni, Marco	CA	IAC-18.D1.IP.5
Eugeni, Marco	CA	IAC-18.C2.9.6
Evans, David	CA	IAC-18.B6.1.6
EVELLIN, Pierre	CA	IAC-18.E6.2.3
EVELLIN, Pierre	A	IAC-18.C4.7-C3.5.2
Evetts, Simon	CA	IAC-18.B3.2.11
Evetts, Simon	CA	IAC-18.D2.9-D6.2.4
Ewald, Reinhold	CA	IAC-18.A5.IP.6
Ewald, Reinhold	CA	IAC-18.A1.7.4
Ewald, Reinhold	CA	IAC-18.A1.7.6
Ewald, Reinhold	A	IAC-18.E3.6.1
Exarchou, Georgia-Eleni	A	IAC-18.E7.IP.18
Ezdakova, Mariia	CA	IAC-18.A1.8.11

F

Name	Role	Paper
Fabbri, Anna	CA	IAC-18.A3.5.4
Faber, Daniel	CA	IAC-18.A3.4B.3
Faber, Weston	CA	IAC-18.A6.9.4
Faber, Weston	CA	IAC-18.A6.IP.9
Fabisch, Alexander	CA	IAC-18.D1.2.7
Fabozzi, Fabio	CA	IAC-18.A7.2.6
Fabozzi, Fabio	CA	IAC-18.E5.4.6
Fabregua, Josian	CA	IAC-18.B1.1.12
Fabrizi, Andrea	CA	IAC-18.C1.5.5
Fabrizi, Andrea	CA	IAC-18.C1.5.10
Facchinetti, Claudia	CA	IAC-18.B1.2.13
Facciol, Kristen	A	IAC-18.B3.1.3
Facciolati, Luca	CA	IAC-18.A2.6.1
Fadairo, Adebayo	CA	IAC-18.B1.IP.15
Faddoul, Antoine	A	IAC-18.D4.1.16
Faddoul, Antoine	A	IAC-18.A3.IP.26
Fagbemiro, Olayinka Abiodun	A	IAC-18.E1.IP.6
Fahad, Ayesha Kosar	CA	IAC-18.B2.3.10
Fairburn, Sue	A	IAC-18.E1.9.14
Falci, Giuseppe	CA	IAC-18.A4.1.6
Falconi, Andrea	A	IAC-18.C3.3.1
Faleg, Francesco	CA	IAC-18.C3.4.4
Falke, Prasad	A	IAC-18.B2.6.2
Falvella, Maria Cristina	CA	IAC-18.E7.IP.20
Familiari, Giuseppe	CA	IAC-18.C2.IP.19
Familiari, Giuseppe	CA	IAC-18.C2.8.1
Fan, Taoying	CA	IAC-18.D1.1.7
Fan, Yesen	CA	IAC-18.C2.2.3
Fang, Fang	CA	IAC-18.B3.9-GTS.2.9
Fang, Hong	CA	IAC-18.A3.5.8
Fang, Hongzheng	CA	IAC-18.D5.1.7
Fang, Hongzheng	CA	IAC-18.D1.4A.10
Fang, Hongzheng	CA	IAC-18.B1.IP.1
Fang, Hongzheng	CA	IAC-18.B2.IP.12
Fang, Yonggang	CA	IAC-18.C2.2.3
Fani, Renato	CA	IAC-18.A1.6.3
Fantino, Elena	A	IAC-18.C1.1.7
Faragalli, Michele	CA	IAC-18.A3.2B.9
Farahvashi, Esfandiar	CA	IAC-18.A6.3.9
Faraji, Farbod	CA	IAC-18.C4.4.8
Faraud, Moreno	CA	IAC-18.C2.1.11
Farid, Ahmed	A	IAC-18.B4.1.10
Fariñas Álvarez, Noelia	CA	IAC-18.A5.1.5
Farres, Ariadna	CA	IAC-18.C1.2.3
Farres, Ariadna	A	IAC-18.C1.9.3
Farres, Ariadna	CA	IAC-18.C1.9.5
Farres, Jordi	CA	IAC-18.B1.4.7
Farto Pereira, Rutilene	CA	IAC-18.D1.IP.12
Fasano, Giancarmine	CA	IAC-18.C1.3.5
Fasano, Giancarmine	CA	IAC-18.A6.5.8
Fasano, Giancarmine	A	IAC-18.B4.7.11
Fasano, Luca	CA	IAC-18.B1.2.13
Fasoulas, Stefanos	CA	IAC-18.B4.2.2
Fasoulas, Stefanos	CA	IAC-18.E1.3.8
Fasoulas, Stefanos	CA	IAC-18.B4.6A.12
Fasoulas, Stefanos	CA	IAC-18.C4.6.4
Fasoulas, Stefanos	CA	IAC-18.A1.7.4
Fasoulas, Stefanos	CA	IAC-18.A1.7.6
Fatek, Joanna	CA	IAC-18.A1.4.9
Fateri, Miranda	CA	IAC-18.E5.1.6

Fateri, Miranda	CA	IAC-18.A3.IP.40
Fateri, Miranda	A	IAC-18.A3.2C.3
Fateri, Miranda	CA	IAC-18.A3.2C.4
Fateri, Miranda	CA	IAC-18.A3.2C.8
Fattinger, Sara	CA	IAC-18.A1.IP.34
Faure, Joel	CA	IAC-18.B2.8-GTS.3.1
Faure, Olivier	A	IAC-18.B3.9-GTS.2.7
Faure, Pauline	CA	IAC-18.E5.4.7
FAVALORO, NUNZIA	A	IAC-18.A5.2.11
Favier, Jean-Jacques	CA	IAC-18.D3.2.6
Favier, Jean-Jacques	CA	IAC-18.D4.5.6
FAYOSE, RUFUS SOLA	A	IAC-18.B2.IP.4
Fecht, Hans	A	IAC-18.A2.6.12
Fecht, Hans	CA	IAC-18.A2.6.13
Federici, Lorenzo	CA	IAC-18.D1.IP.5
Federico, Giulia	CA	IAC-18.E1.6.4
Fedorov, Igor	CA	IAC-18.B4.6B.3
Feehan, David	CA	IAC-18.D1.1.6
Feetham, Luke	CA	IAC-18.B2.IP.20
Feetham, Luke	CA	IAC-18.C1.IP.20
Fehr, Alexander	A	IAC-18.B6.2.8
Fei, SUN	CA	IAC-18.B4.6B.2
Fei, Zhang	CA	IAC-18.D2.IP.8
Feiner, Steven	CA	IAC-18.B3.7.6
Feldstein, Valery	CA	IAC-18.A6.3.10
Feldstein, Valery	CA	IAC-18.C2.6.1
Felli, Ferdinando	CA	IAC-18.C2.8.13
Fellous, Jean-Louis	A	IAC-18.E4.1.3
Fellous, Jean-Louis	CA	IAC-18.A3.5.11
Fellowes, Simon	CA	IAC-18.B4.3.5
Fellowes, Simon	CA	IAC-18.A6.5.1
Fellowes, Simon	CA	IAC-18.A6.5.2
Fellowes, Simon	CA	IAC-18.C3.4.5
Fellows, Abigail	CA	IAC-18.A1.2.28
Felsenberg, Dieter	CA	IAC-18.A1.2.25
Felsenberg, Dieter	CA	IAC-18.A1.4.2
Felsenberg, Dieter	CA	IAC-18.A1.4.8
Felsenberg, Dieter	CA	IAC-18.A1.4.10
Felsenberg, Dieter	CA	IAC-18.A1.4.15
Felsner, Sandra	CA	IAC-18.A1.8.4
Feltrin, Francesco	CA	IAC-18.A6.3.9
FENG, DAN	CA	IAC-18.D1.3.12
FENG, DAN	CA	IAC-18.B6.IP.2
Feng, Fan	A	IAC-18.B1.IP.12
FENG, FEI	A	IAC-18.A6.IP.46
FENG, JIE	A	IAC-18.C4.4.13
Feng, Jinglang	CA	IAC-18.D2.3.9
Feng, Louis Wei-yu	A	IAC-18.A6.5.10
Feng, Yu	CA	IAC-18.C4.IP.7
Feng, Yu	A	IAC-18.C4.IP.23
Fenili, André	CA	IAC-18.C2.3.7
Feretti, Luigina	CA	IAC-18.D4.2.12
Ferguson, Chrisopher	A	IAC-18.B3.2.1
Fernandes, George	CA	IAC-18.C2.7.7
Fernandes, Jorge	CA	IAC-18.A1.6.11
Fernandez, Miguel Angel	A	IAC-18.B2.2.3
Fernandez Garcia, Carolina	CA	IAC-18.E6.2.9
Fernandez Hernandez, Ignacio	A	IAC-18.B2.4.1
Fernandez Hernandez, Ignacio	A	IAC-18.B2.5.2
Fernandez-Saldivar, Juan	CA	IAC-18.B4.4.3
Fernie, David	CA	IAC-18.B4.4.6
Fernández Ibarz, José María	CA	IAC-18.D1.2.1
Feroci, Marco	CA	IAC-18.B4.2.11
Feron, Jean-Brieuc	CA	IAC-18.E1.6.3
Ferra, Lionel	CA	IAC-18.B3.6-A5.3.8
Ferrando, Emanuele	CA	IAC-18.C3.4.4
Ferrari, Andrea	CA	IAC-18.C2.8.5
Ferrari, Gabriele	CA	IAC-18.D1.4A.12
Ferrari, Gabriele	CA	IAC-18.D1.4A.12
Ferraro, Serena	CA	IAC-18.B4.2.7
Ferrato, Eugenio	CA	IAC-18.C4.4.8
Ferraz, Marta	A	IAC-18.A2.5.10
Ferrazzani, Marco	A	IAC-18.E7.1.1
Ferrazzini, Luca	CA	IAC-18.D3.3.10
Ferreira, Alessandra	A	IAC-18.D4.IP.6
Ferreira, Edmundo	CA	IAC-18.A2.5.10
FERREIRA, Eugenio	CA	IAC-18.A6.6.10
Ferreira, José	CA	IAC-18.A6.4.9
Ferreira, José	A	IAC-18.A6.IP.37
Ferreira, João	A	IAC-18.A3.3B.7
Ferreira, Luís	CA	IAC-18.A6.1.7
Ferretti, Stefano	CA	IAC-18.D4.2.12
Ferretti, Stefano	A	IAC-18.B5.2.1
Ferretti, Stefano	A	IAC-18.D3.4.10
Ferretto, Davide	CA	IAC-18.D1.4A.12
Ferri, Antonella	CA	IAC-18.A3.1.10
Ferrier, Pierric	A	IAC-18.B1.1.4
Ferro, Carlo Giovanni	A	IAC-18.C2.8.10
Ferro, Carlo Giovanni	CA	IAC-18.C2.9.8
Fessl, Jan	A	IAC-18.C4.5.10
Fessl, Jan	CA	IAC-18.C4.IP.38
Fetter, Viktor	CA	IAC-18.A1.3.3
Fetter, Viktor	CA	IAC-18.A1.3.20
Fetter, Viktor	A	IAC-18.A1.6.11
Fetter, Viktor	CA	IAC-18.A2.IP.5
Fetter, Viktor	CA	IAC-18.A1.7.8
Fey, Görschwin	CA	IAC-18.D1.1.1
Feyen, Anja	CA	IAC-18.A1.7.3
Fiebig, Uwe-Carsten	CA	IAC-18.A3.2A.8
Fiedler, Hauke	A	IAC-18.A6.1.6
Fiedler, Hauke	CA	IAC-18.A6.3.5
Fiedler, Hauke	CA	IAC-18.A6.9.7
Fietze, Ingo	CA	IAC-18.A1.4.9
Filice, Valerio	CA	IAC-18.D1.IP.5
Filippi, Gianluca	A	IAC-18.D1.4B.11
Filippi, Matteo	CA	IAC-18.C2.2.10
Filosa, Andrea	CA	IAC-18.A3.2C.6
Finke, Felix	A	IAC-18.A2.1.3
Finogenov, Sergey	A	IAC-18.C4.7-C3.5.8
Finozzi, Antonio	CA	IAC-18.A6.3.7
Fiore, Fabrizio	CA	IAC-18.B4.2.11
Fiori, Carlo	CA	IAC-18.B4.8.1
Fiorini, Paolo	CA	IAC-18.A3.IP.16
Firsyuk, Sergey	CA	IAC-18.D1.IP.24
Fisackerly, Richard	CA	IAC-18.A3.2B.2
Fischer, Henning	CA	IAC-18.A7.3.3
Fischer, Julian	CA	IAC-18.D3.1.3
Fischer, Julian	CA	IAC-18.E1.4.2
Fischer, Philipp M.	A	IAC-18.D1.4B.8
Fischer, Sebastian	CA	IAC-18.B1.2.8
Fischer, Ulrich	CA	IAC-18.D2.7.5
Fittock, Mark	CA	IAC-18.B3.9-GTS.2.10
Fittock, Mark	CA	IAC-18.A7.IP.2
Fittock, Mark	A	IAC-18.A6.6.2
Flad, Michael	CA	IAC-18.A3.2A.8
Flegel, Sven Kevin	CA	IAC-18.A6.2.6
Fleischer, Heidi	CA	IAC-18.A2.7.13
Fleischer, Louise	CA	IAC-18.B3.9-GTS.2.1
Fleith, Patrick	CA	IAC-18.D4.5.3
Fleming, Douglas	CA	IAC-18.A5.1.6
Flentje, Warren	A	IAC-18.D4.2.2
Flentje, Warren	A	IAC-18.E3.3.1
Flohrer, Tim	CA	IAC-18.A6.IP.6
Flohrer, Tim	CA	IAC-18.A6.IP.34
Florczuk, Wojciech	CA	IAC-18.D2.9-D6.2.11
Flores, Jorge	CA	IAC-18.B2.4.5
Flores, Roberto	CA	IAC-18.C1.1.7
Flores Castillo, Pedro Mario	CA	IAC-18.E1.IP.7
Flores Pozo, Kattia	A	IAC-18.B6.2.1
Florin, Gunnar	CA	IAC-18.D2.2.5
Florin, Gunnar	CA	IAC-18.A2.5.9
Florin, Gunnar	CA	IAC-18.D2.6.7
Flögel, Sascha	CA	IAC-18.A3.2A.8
Foglia Manzillo, Pierluigi	CA	IAC-18.B4.4.7
Foglia Manzillo, Pierluigi	A	IAC-18.A3.4B.4
Foing, Bernard	A	IAC-18.A3.2B.1
Foing, Bernard	A	IAC-18.E5.3.8
Foing, Bernard	A	IAC-18.A3.3B.3
Foing, Bernard	A	IAC-18.A5.1.7
Foing, Bernard	CA	IAC-18.A1.6.8
Foing, Bernard	CA	IAC-18.A3.IP.69
Foing, Bernard	CA	IAC-18.E5.IP.4
Foing, Bernard	A	IAC-18.B3.6-A5.3.10
Foing, Bernard	A	IAC-18.E1.9.2
Foing, Bernard	CA	IAC-18.A3.2C.8
Folta, David C.	CA	IAC-18.C1.8.9
Folta, David C.	CA	IAC-18.C1.9.1
Folta, David C.	CA	IAC-18.C1.9.3
Folta, David C.	CA	IAC-18.C1.9.5
Fomina, Elena	CA	IAC-18.A1.2.7
Fomina, Elena	A	IAC-18.A1.2.9
Fomina, Elena	CA	IAC-18.A1.IP.13
Fonod, Robert	A	IAC-18.C1.3.11
Fonod, Robert	CA	IAC-18.B4.6B.5
Fonseca Naranjo, Geiner Gustavo	CA	IAC-18.B4.4.5
Forbes, James	CA	IAC-18.B4.2.9
Forbes-Spyratos, Sholto	CA	IAC-18.D2.4.4
Fordham, Bart	CA	IAC-18.B4.6A.3
Foreman, Veronica	A	IAC-18.B1.1.2
Forest, Julien	CA	IAC-18.D1.IP.8
Forgan, Duncan	CA	IAC-18.A4.2.1
Fornarelli, David	CA	IAC-18.C1.IP.29
Forsberg, Li	A	IAC-18.C4.3.8
Forshaw, Jason	CA	IAC-18.A6.8.6
Forsman, Alec	A	IAC-18.A3.IP.18
Forster, Harry	CA	IAC-18.B1.3.1
Forsythe, Tony	CA	IAC-18.D5.2.6
Forsythe, Tony	CA	IAC-18.E1.5.11
Fortin, Clement	CA	IAC-18.E1.4.3
Fortov, Vladimir	CA	IAC-18.A2.6.3
Fortunato, Vito	CA	IAC-18.A6.1.8
Fortunato, Vito	CA	IAC-18.A7.3.1
Fotopoulos, Dimitris	CA	IAC-18.A1.3.11
Fournier, Roxanne	CA	IAC-18.A1.7.18
Foust, Rebecca	A	IAC-18.C1.6.3
Fraenz, Markus	CA	IAC-18.A7.3.3
Fragiacomo, Manrico	CA	IAC-18.C4.5.7
Fragoso Trigo, Guilherme	CA	IAC-18.D2.5.9
FRANC, Julien	CA	IAC-18.D2.5.3
Franceschetti, Paola	CA	IAC-18.B6.3.5
Franceschetti, Paola	CA	IAC-18.B6.3.6
Francesconi, Alessandro	CA	IAC-18.A6.2.10
Francesconi, Alessandro	CA	IAC-18.A6.4.6
Francesconi, Alessandro	CA	IAC-18.A6.3.7
Francesconi, Alessandro	A	IAC-18.A6.3.9
Francesconi, Alessandro	CA	IAC-18.A6.IP.19
FRANCESCONI, DANIELE	CA	IAC-18.D2.3.11
FRANCESCONI, DANIELE	CA	IAC-18.D2.3.11
FRANCESCONI, DANIELE	CA	IAC-18.D2.3.11
Franchi, Loris	CA	IAC-18.B4.6B.13
Frank, Frieder	CA	IAC-18.E2.3-GTS.4.1
Frank, Robin J.	A	IAC-18.E5.3.7
Frantzidi, Christos	CA	IAC-18.A1.3.11
Frantzidi, Christos	CA	IAC-18.A1.3.12
Frantzidi, Christos	A	IAC-18.A1.3.13
Frantzidi, Christos	CA	IAC-18.A1.3.14
Franz, Tobias	CA	IAC-18.A2.5.6
Franzese, Vittorio	CA	IAC-18.A3.2A.7
Franzese, Vittorio	A	IAC-18.C1.6.13
Franzese, Vittorio	CA	IAC-18.B4.8.5
Franzoni, Felipe	A	IAC-18.C2.1.3
Fratini, Simone	CA	IAC-18.B3.6-A5.3.3
Fray, Sebastian	CA	IAC-18.B1.3.4
Frayling, Alyssa	A	IAC-18.E3.3.7
Freeland, Steven	CA	IAC-18.E7.4.2
Freeman, Anthony	A	IAC-18.D4.IP.5
Freeman, Marsha	A	IAC-18.E4.1.7
Freimann, Andreas	CA	IAC-18.B2.6.8
French, Andrew	CA	IAC-18.C1.9.8
Frese, Walter	A	IAC-18.B2.2.1
Freund, Raphael	CA	IAC-18.A3.2B.11
Frey, Stefan	A	IAC-18.A6.10-C1.7.8
Frezza, Lorenzo	CA	IAC-18.B4.1.8
Frezza, Lorenzo	CA	IAC-18.A6.10-C1.7.9
Frezza, Lorenzo	CA	IAC-18.B4.6B.10
Friedl, Michael	CA	IAC-18.E7.5.17
Friend, Jonathan	CA	IAC-18.A3.2A.10
Friend, Jonathan	CA	IAC-18.B4.5.13
Frigeri, Alessandro	CA	IAC-18.A3.IP.51
Frioult, Marcy	CA	IAC-18.A1.7.3
Frischauf, Norbert	A	IAC-18.B2.5.7
Fritsch, Dieter	CA	IAC-18.B4.3.8
Fritzsche, Barbara	CA	IAC-18.A2.2.15
Fritzsche, Barbara	A	IAC-18.A2.4.12
Froböse, Linus	CA	IAC-18.C3.3.7
Froehlich, LL.M., MAS, Annette	CA	IAC-18.E7.1.10
Froehlich, LL.M., MAS, Annette	A	IAC-18.E3.4.5
Froehlich, LL.M., MAS, Annette	A	IAC-18.E7.4.8
Froitzheim, Andreas	CA	IAC-18.A2.7.18
Frolov, Kirill	CA	IAC-18.E2.4.8
Frommelt, Marcel	CA	IAC-18.E2.3-GTS.4.9
Frost, Anja	CA	IAC-18.B1.5.3
Frost, Anja	A	IAC-18.B1.5.4
Frost, Anja	CA	IAC-18.B1.IP.7
Frost, Anja	CA	IAC-18.B1.IP.19
Frydman, Jon	CA	IAC-18.A2.2.7
Fu, Sheng	CA	IAC-18.B4.6A.7
Fu, Xiaojing	CA	IAC-18.D1.4A.10
Fu, Xiaowei	A	IAC-18.D1.4A.10
Fuchs, Christian	CA	IAC-18.B3.4-B6.4.7
Fuchs, Christian	CA	IAC-18.B6.2.10
Fuchs, Jared	A	IAC-18.A7.3.10
Fuchs, Jared	A	IAC-18.D2.9-D6.2.12
Fuchs, Joachim	CA	IAC-18.D1.4B.3
Fugmann, Martin	CA	IAC-18.B4.6A.12
Fuhrmann, Thomas	A	IAC-18.C4.1.8
Fujii, Kozo	CA	IAC-18.E1.3.2
Fujikawa, Takahiro	CA	IAC-18.D2.6.2
Fujita, Shinya	CA	IAC-18.C2.7.5
Fujiwara, Masahiro	CA	IAC-18.C1.5.4
Fukazawa, Takeyuki	A	IAC-18.D4.3.9
Fukuda, Hiroshi	CA	IAC-18.D5.3.4
Fukunaga, Momoko	A	IAC-18.C2.2.2
Fukuzato, Adriana	CA	IAC-18.B6.2.1
Fulton, JoAnna	A	IAC-18.C1.4.3
Fumagalli, Alessandro	CA	IAC-18.D3.2.12
Fumagalli, Alessandro	CA	IAC-18.A3.3B.1
Fumagalli, Alessandro	CA	IAC-18.D3.IP.2
Funabiki, Nobuhiro	CA	IAC-18.D3.1.2
Funaki, Ikkoh	CA	IAC-18.C4.7-C3.5.11
Funakoshi, Yusuke	A	IAC-18.C4.IP.8
Funtova, Irina	A	IAC-18.A1.2.1
Funtova, Irina	CA	IAC-18.A1.2.2
Funtova, Irina	CA	IAC-18.A1.2.4
Funtova, Irina	CA	IAC-18.A1.2.5
Furfaro, Roberto	CA	IAC-18.A3.2A.7
Furfaro, Roberto	CA	IAC-18.A5.2.2
Furfaro, Roberto	CA	IAC-18.B4.8.5
Fursova, Anastasiia	A	IAC-18.A3.IP.4
Furumoto, Masahiro	A	IAC-18.A6.2.2
Furuya, Hiroshi	CA	IAC-18.C2.2.7
Furuya, Hiroshi	A	IAC-18.B3.7.6
Fusaro, Roberta	CA	IAC-18.D1.4A.7
Fusaro, Roberta	A	IAC-18.D1.4A.12
Fusaro, Roberta	CA	IAC-18.D6.3.4
Fusaro, Roberta	CA	IAC-18.C4.6.6
Fusaro, Roberta	CA	IAC-18.D2.8-A5.4.7
Förstner, Roger	CA	IAC-18.B6.3.10
Förstner, Roger	CA	IAC-18.B2.3.2
Förstner, Roger	CA	IAC-18.A6.6.4
Fürstenau, Johannes Ferdinand	CA	IAC-18.C1.4.2
Fürstenau, Johannes Ferdinand	A	IAC-18.E2.4.2

G

Name	Role	Paper
G, Levin	CA	IAC-18.C2.IP.33
G, Levin	CA	IAC-18.C4.IP.49
G, Levin	CA	IAC-18.C4.10.12

Gabriel, DUSSOLLIER	A	IAC-18.C4.1.12
GABRIELLI, Pierre	A	IAC-18.E2.3-GTS.4.3
GABRIELLI, Pierre	A	IAC-18.D5.1.4
Gadde, Nirmal	CA	IAC-18.B4.8.6
Gagliardi, Marina	A	IAC-18.E7.2.2
Gagnon, Eric	CA	IAC-18.A3.2B.6
Gaidis, Alexander	CA	IAC-18.A5.1.9
Gairiseb, Alexander	A	IAC-18.E7.1.10
Galambos, Mate	CA	IAC-18.B2.8-GTS.3.5
Galand, Quentin	A	IAC-18.A2.3.10
Galano, Damien	CA	IAC-18.D1.2.1
Galano, Damien	CA	IAC-18.A7.3.2
Galarreta, Daniel	A	IAC-18.D5.2.3
Galbiati, Claudio	A	IAC-18.B6.3.8
Galica, Carol	CA	IAC-18.E1.7.1
Galla, Daniel	A	IAC-18.C2.4.5
Galoforo, Germana	CA	IAC-18.E1.3.6
Galoforo, Germana	CA	IAC-18.E1.1.2
Galoforo, Germana	CA	IAC-18.E1.2.12
Gamal, Hamed	CA	IAC-18.E1.5.3
Gamal, Hamed	CA	IAC-18.B2.IP.5
Gamal, Hamed	CA	IAC-18.B3.IP.14
Gamal, Hamed	A	IAC-18.B6.IP.5
Gamal, Hamed	A	IAC-18.D2.IP.9
Gamal, Hamed	A	IAC-18.D2.9-D6.2.10
GAMET, Philippe	CA	IAC-18.B1.1.4
Gamper, Eduard	CA	IAC-18.D6.1.9
Gan, Qingzhong	A	IAC-18.D2.IP.8
Ganapathi, Gani	CA	IAC-18.C4.4.1
Ganatra, Devanshu	A	IAC-18.E3.2.10
Gancet, Jeremi	CA	IAC-18.D1.2.7
Gancheva, Desislava	CA	IAC-18.D3.1.8
Gangale, Shalini	CA	IAC-18.B1.3.9
Gangtie, Zheng	CA	IAC-18.B4.7.4
Gantina, Hendra	CA	IAC-18.B1.1.13
Ganzer, Britta	CA	IAC-18.A1.6.4
Ganzer, Britta	CA	IAC-18.A1.6.7
Gao, Ai	CA	IAC-18.D2.3.5
GAO, HE	CA	IAC-18.C2.7.12
Gao, Yuanhe	CA	IAC-18.D1.4A.10
Gao, Yunfei	CA	IAC-18.C2.5.8
Gao, Zhigang	CA	IAC-18.B2.3.11
Garagnani, Giorgio	CA	IAC-18.E7.2.2
Garbacz, Hunter	CA	IAC-18.E6.2.1
Garbi, Giuliani	CA	IAC-18.D3.4.12
Garcia, Antonio	A	IAC-18.A7.1.2
Garcia, Enrique	CA	IAC-18.B4.6B.9
Garcia, Francisco	CA	IAC-18.B4.5.10
Garcia, Francisco	A	IAC-18.A2.IP.10
Garcia Gutierrez, Borja	CA	IAC-18.A3.4B.4
Garcia Gutierrez, Francisco de Borja	CA	IAC-18.A3.4A.5
Garcia Hemme, Hugo	CA	IAC-18.A6.5.3
GARCIA ROJAS VAZQUEZ, LUISA	A	IAC-18.A1.IP.35
Garcia-Almiñana, Daniel	CA	IAC-18.B4.2.2
Garcia-Almiñana, Daniel	CA	IAC-18.C4.6.4
Garcia-Pelayo, Ricardo	CA	IAC-18.A6.2.10
García Ruíz, Karl Mario	CA	IAC-18.C3.3.8
García Ruíz, Karl Mario	CA	IAC-18.C2.6.12
García-Pérez, Andrés	CA	IAC-18.C2.1.5
Gardner, Thomas	CA	IAC-18.A3.IP.18
Garg, Mannika	A	IAC-18.C3.4.12
Gargano, Mark	A	IAC-18.E1.2.11
Garman, Dave	CA	IAC-18.A1.3.17
Garramone, Luciano	CA	IAC-18.B2.8-GTS.3.1
Garrett, Mike	A	IAC-18.A4.1.3
Gasbarri, Paolo	CA	IAC-18.C2.1.4
Gasbarri, Paolo	CA	IAC-18.C2.2.6
Gasbarri, Paolo	CA	IAC-18.C2.3.8
Gasbarri, Paolo	CA	IAC-18.C2.3.9
Gasbarri, Paolo	CA	IAC-18.C1.4.11
Gasbarri, Paolo	CA	IAC-18.D1.6.11
Gasent-Blesa, José Luis	CA	IAC-18.C2.IP.2
Gashinova, Marina	CA	IAC-18.B1.3.10
Gasquez, Oriol	CA	IAC-18.A3.IP.29
Gast, Ulf	CA	IAC-18.A1.2.25
Gast, Ulf	CA	IAC-18.A1.4.2
Gast, Ulf	CA	IAC-18.A1.4.8
Gast, Ulf	CA	IAC-18.A1.4.10
Gast, Ulf	CA	IAC-18.A1.4.15
Gatens, Robyn	A	IAC-18.B3.3.1
Gates, Michele	A	IAC-18.B3.1.8
Gaubert, Cecile	A	IAC-18.E7.2.6
Gaudenzi, Paolo	CA	IAC-18.C2.5.3
Gaudenzi, Paolo	CA	IAC-18.D1.IP.5
Gaudenzi, Paolo	CA	IAC-18.C2.9.6
Gaudin, David	CA	IAC-18.E2.3-GTS.4.2
Gaudin, David	CA	IAC-18.E2.3-GTS.4.4
Gaudin, David	CA	IAC-18.A5.1.5
Gautier, Florian	CA	IAC-18.E2.3-GTS.4.5
Gauvrit-Ledogar, Julie	CA	IAC-18.D2.7.8
Gavaldà, Fina	CA	IAC-18.B5.1.11
Gavaldà, Josefina	CA	IAC-18.A2.2.8
Gavaldà, Josefina	CA	IAC-18.A2.4.5
Gaviraghi, Giorgio	A	IAC-18.D4.1.18
Gaza, Ramona	CA	IAC-18.A1.5.10
Gaza, Razvan	A	IAC-18.A1.5.10
Gegenheimer, Stuart	CA	IAC-18.A6.7.6
Gegeoglu, Kaan	A	IAC-18.C4.3.10
Gegner, Jan	A	IAC-18.A2.6.8
Gegout, Dorian	CA	IAC-18.A6.7.4
Gehly, Steve	CA	IAC-18.A6.1.2
Gehly, Steve	A	IAC-18.A6.10-C1.7.12
Geier, Stephan	CA	IAC-18.A7.3.7
Geismayr, Laura	CA	IAC-18.C2.IP.18
Gelis, Daniel	CA	IAC-18.B1.1.12
Genchi, Giada Graziana	A	IAC-18.A2.7.9
Genov, Nikolai	CA	IAC-18.A1.IP.22
Genova, Anthony	CA	IAC-18.A5.2.2
Genta, Giancarlo	A	IAC-18.A3.2A.11
Genta, Giancarlo	A	IAC-18.A5.2.4
Genta, Giancarlo	CA	IAC-18.D4.4.5
Georgantas, Konstantinos Marios	CA	IAC-18.E2.3-GTS.4.11
Gerakakis, Stratos	A	IAC-18.B5.1.7
Gerardin, Simone	CA	IAC-18.A6.3.7
Gerdom, Christopher	CA	IAC-18.D2.IP.12
Gerecs, András	CA	IAC-18.A1.5.11
Gerené, Sam	CA	IAC-18.D5.2.5
Gerené, Sam	A	IAC-18.D1.4B.3
Gerhard, Michael-Peter	CA	IAC-18.D1.5.4
Gerlach, Darius	CA	IAC-18.A1.2.22
Gerlach, Darius	CA	IAC-18.A1.2.25
Gerlach, Darius	CA	IAC-18.A1.4.2
Germain, Stephane	CA	IAC-18.B4.4.8
Germani, Chiara	CA	IAC-18.B1.2.12
Gerndt, Andreas	CA	IAC-18.A2.5.6
Gerndt, Andreas	CA	IAC-18.D1.4B.8
Gerngross, Tobias	A	IAC-18.D2.5.4
Gerstenmaier, William H.	A	IAC-18.B3.1.4
Gerstmann, Jens	CA	IAC-18.C4.5.15
Gerstmann, Jens	A	IAC-18.C4.10.5
Gerth, Ingo	CA	IAC-18.D3.2.10
Gerth, Ingo	CA	IAC-18.A3.3A.11
Gerth, Ingo	CA	IAC-18.D5.3.1
Gerzer, Rupert	CA	IAC-18.A1.IP.15
Gerzer, Rupert	CA	IAC-18.A2.7.3
Gessini, Paolo	CA	IAC-18.B1.5.8
Ghafoor, Nadeem	A	IAC-18.A3.2B.6
GHANA, ANU-SSTL	CA	IAC-18.E1.1.11
Ghassabian Gilan, Hady	A	IAC-18.B3.5.6
Ghassabian Gilan, Hady	A	IAC-18.A3.IP.2
Ghassabian Gilan, Hady	CA	IAC-18.A3.IP.7
Ghazanfarinia, Sajjad	CA	IAC-18.C3.1.9
Ghazanfarinia, Sajjad	A	IAC-18.E6.1.6
Ghazanfarinia, Sajjad	A	IAC-18.E1.8.2
Ghazanfarinia, Sajjad	CA	IAC-18.E5.4.5
Ghazanfarinia, Sajjad	A	IAC-18.E1.9.11
Ghazanfarinia, Sajjad	A	IAC-18.E5.5.10
Ghazanfarinia, Sajjad	A	IAC-18.E6.3.1
Gheldof, Jelle	CA	IAC-18.E1.6.3
Ghidini, Tommaso	CA	IAC-18.C2.8.7
Ghiste, Stephane	CA	IAC-18.B3.5.1
Ghiste, Stephane	CA	IAC-18.B3.6-A5.3.8
Ghizoni, Leonardo	CA	IAC-18.B4.2.2
Ghizoni, Leonardo	CA	IAC-18.A6.6.4
Ghizoni, Leonardo	CA	IAC-18.C4.6.4
Ghose, Essna	CA	IAC-18.B2.3.8
Ghose, Essna	CA	IAC-18.B2.6.3
Ghosh, Avishek	CA	IAC-18.B3.IP.11
Ghosh, Avishek	A	IAC-18.C2.IP.13
Giacomuzzo, Cinzia	CA	IAC-18.A6.2.10
Giacomuzzo, Cinzia	CA	IAC-18.A6.3.7
Giacomuzzo, Cinzia	CA	IAC-18.A6.3.9
Gianfermo, Andrea	A	IAC-18.E1.3.7
Gianfermo, Andrea	CA	IAC-18.A6.10-C1.7.9
Gianfermo, Andrea	CA	IAC-18.B4.6B.10
Gianfermo, Andrea	A	IAC-18.B2.7.4
Giannopapa, Christina	CA	IAC-18.E3.1.9
Giannopapa, Christina	CA	IAC-18.D5.2.8
Giannopapa, Christina	CA	IAC-18.B5.2.12
Giannopapa, Christina	CA	IAC-18.E3.IP.3
Giannopapa, Christina	CA	IAC-18.E6.IP.1
Giannopapa, Christina	CA	IAC-18.E6.3.4
Giannopapa, Christina	CA	IAC-18.E6.3.6
Giannopapa, Christina	CA	IAC-18.D2.9-D6.2.5
Giannopapa, Christina	CA	IAC-18.E7.7-B3.8.11
Gianotti Pret, Marco	CA	IAC-18.A3.2C.4
Giardina, Giovanni	A	IAC-18.D2.3.8
Gibbings, Alison	CA	IAC-18.B1.2.12
Gibbings, Alison	A	IAC-18.A3.3A.11
Gibbings, Alison	A	IAC-18.A7.IP.2
Gierse, Andreas	A	IAC-18.A2.5.1
Giggenbach, Dirk	CA	IAC-18.B6.2.10
Gil Fernandez, Jesus	CA	IAC-18.A3.4B.4
Gil-Fernandez, Jesus	CA	IAC-18.A3.4A.5
Gil-Fernandez, Jesus	CA	IAC-18.B6.2.11
Gil-Fernandez, Jesus	CA	IAC-18.D1.6.10
Gilbert, Chris	CA	IAC-18.D2.4.7
Gill, Eberhard	CA	IAC-18.C1.3.11
Gill, Eberhard	A	IAC-18.C1.5.1
Gill, Eberhard	CA	IAC-18.B4.6A.5
Gill, Eberhard	CA	IAC-18.C1.6.12
Gill, Eberhard	CA	IAC-18.B4.6B.5
Gill, Eberhard	CA	IAC-18.B4.7.2
Gilleron, Jerome	CA	IAC-18.E2.3-GTS.4.9
Gilleron, Jerome	CA	IAC-18.B3.9-GTS.2.10
Gillies, Daniel	CA	IAC-18.D2.7.3
Gilou, Sotiria	CA	IAC-18.A1.3.11
Gilou, Sotiria	CA	IAC-18.A1.3.12
Gilou, Sotiria	CA	IAC-18.A1.3.13
Gimbel, Katharina	CA	IAC-18.A2.2.11
Gimbel, Katharina	CA	IAC-18.A2.2.17
Gingras, David	CA	IAC-18.B3.6-A5.3.3
Giolito, Damien	CA	IAC-18.A3.IP.13
Giordano, Alessandro M.	CA	IAC-18.D1.6.10
Giordano, Alessandro Massimo	CA	IAC-18.D1.1.9
Gisi, Michael	A	IAC-18.B3.7.4
Giulietti, Fabrizio	CA	IAC-18.C1.3.4
Giulietti, Fabrizio	CA	IAC-18.C1.4.5
Gkivogkli, Polyxeni	CA	IAC-18.A1.3.11
Gkivogkli, Polyxeni	A	IAC-18.A1.3.12
Gkivogkli, Polyxeni	CA	IAC-18.A1.3.13
Gkolias, Ioannis	CA	IAC-18.A6.4.6
Glazkova, Natalia	A	IAC-18.A1.IP.15
Gleeson, Emily	A	IAC-18.C1.IP.39
Gleeson, Mark	A	IAC-18.E1.1.1
Gloder, Alessia	CA	IAC-18.E2.3-GTS.4.9
Glos, Martin	CA	IAC-18.A1.4.9
Gmeiner, Heinrich	CA	IAC-18.A3.2A.8
Gnat, Marcin	CA	IAC-18.B6.2.10
Gobert, Thibaud	CA	IAC-18.E5.1.6
Gobert, Thibaud	CA	IAC-18.D3.3.7
GODENIR, Aurelien	A	IAC-18.B1.IP.5
Godfrey, Alexander	CA	IAC-18.A3.3A.5
Goel, Ashish	CA	IAC-18.B4.2.7
Goel, Ena	CA	IAC-18.A4.IP.6
Goh, Cher-Hiang	CA	IAC-18.D1.3.12
Goh, Cher-Hiang	CA	IAC-18.B6.IP.2
Gohlke, Martin	CA	IAC-18.A2.1.7
Gokhman, Ilya	CA	IAC-18.A1.1.4
Golda, Carlo	CA	IAC-18.E7.3.1
Goldenko, Natalia	A	IAC-18.A6.3.10
Goldenko, Natalia	A	IAC-18.C2.6.1
Golemis, Aris	A	IAC-18.E2.3-GTS.4.11
Goli, Marta	CA	IAC-18.A7.2.6
Golikov, Alexander	A	IAC-18.D5.1.5
Golkar, Alessandro	CA	IAC-18.A2.7.3
Gollhofer, Albert	CA	IAC-18.A1.2.25
Gollhofer, Albert	CA	IAC-18.A1.4.2
Gollinger, Klaus	CA	IAC-18.A2.1.4
Gollins, Nicholas	CA	IAC-18.A5.1.5
Gollins, Nicholas	CA	IAC-18.D2.8-A5.4.6
Golubek, Alexandr	CA	IAC-18.A6.IP.39
Gomet, Laurent	A	IAC-18.C4.3.14
Gomez, Eduardo	CA	IAC-18.B6.IP.1
Gomez, Gerard	CA	IAC-18.C1.1.3
Gomez, Gerard	CA	IAC-18.C1.2.1
Gomez, Gerard	CA	IAC-18.C1.2.10
Gomez, Gerard	CA	IAC-18.C1.9.9
Gomez Jenkins, Marco	A	IAC-18.B4.1.4
Gomez Jenkins, Marco	A	IAC-18.B4.9-GTS.5.3
Gomez Rodriguez, Carolina	A	IAC-18.B3.IP.13
Gomez-Delrio, Andrew	A	IAC-18.C2.2.12
Goncharov, Nikita	CA	IAC-18.E2.4.8
Gong, Keyu	CA	IAC-18.C4.IP.23
Gong, Zizheng	CA	IAC-18.A6.3.1
Gong, Zizheng	A	IAC-18.A6.IP.23
Gonzalez, Iciar	A	IAC-18.A2.5.8
Gonzalez del Amo, Jose	CA	IAC-18.C4.4.6
Gonzalez del Amo, Jose	CA	IAC-18.D2.8-A5.4.10
Gonzalez-Pastor, Eduardo	CA	IAC-18.A1.8.17
GonzalezConde, Enrique	A	IAC-18.E1.5.11
GonzalezConde, Enrique	CA	IAC-18.D1.5.3
Gonzalo, Juan Luis	CA	IAC-18.A6.2.10
González, Gerardo	CA	IAC-18.B4.2.2
González, Gerardo	CA	IAC-18.C4.6.4
González Peytaví, Graciela	CA	IAC-18.B2.3.2
González-Muiño, Alberto	CA	IAC-18.B4.2.10
Gooding, David	CA	IAC-18.B4.6A.1
Gopal, Chaitanya	CA	IAC-18.B2.3.8
Gopal, Chaitanya	A	IAC-18.B2.6.3
Gopalakrishnan, Preetha	A	IAC-18.D1.1.6
Gora, Jimmy	A	IAC-18.B5.2.9
Gorbunova, Irina	CA	IAC-18.C1.IP.36
Gordeev, Svyatoslav	A	IAC-18.C4.IP.34
Gordienko, Kirill	CA	IAC-18.A1.4.14
Gordienko, Kirill	A	IAC-18.A1.IP.12
Gordon, Karsten	CA	IAC-18.B4.6A.4
Gordon, Kayleigh	A	IAC-18.E3.6.11
Gordon, Keith	CA	IAC-18.C2.6.2
Gorlier, Damien	CA	IAC-18.A1.2.5
Gorski, Jedrzej	A	IAC-18.A5.2.12
Gorte, Ben	CA	IAC-18.B4.4.7
Goss, Rosalin	A	IAC-18.A1.5.6
Goss, Rosalin	A	IAC-18.A1.IP.28
Gossamsetti, Guna Surendra	A	IAC-18.D2.6.2
Goswami, Nandu	CA	IAC-18.A1.2.23
Gotzig, Ulrich	A	IAC-18.C4.10.1
Goumeniouk, Natasha	A	IAC-18.A1.3.19
Gourav, Daivik R	CA	IAC-18.E2.4.7
Governale, Giuseppe	CA	IAC-18.D4.1.8
Governale, Giuseppe	CA	IAC-18.A5.1.5
Governale, Giuseppe	CA	IAC-18.E3.IP.13
Govindaraj, Shashank	CA	IAC-18.D1.2.7
Goyal, Tushar	CA	IAC-18.D1.2.8
Grabi, Florian	CA	IAC-18.E2.3-GTS.4.1
Graef, Peter	CA	IAC-18.A1.4.1
Grafodatsky, Oleg Sergeevich	CA	IAC-18.A3.3A.3
Grafodatsky, Oleg Sergeevich	A	IAC-18.B1.IP.18
Grafodatsky, Oleg Sergeevich	A	IAC-18.D2.8-A5.4.3
Grainger, Jacob	CA	IAC-18.D1.1.6

Grajeda, Genaro	CA	IAC-18.D3.1.6
Grajeda, Genaro	A	IAC-18.D3.IP.6
Grand-Maison, William	CA	IAC-18.E1.IP.23
Grande, Jøran	A	IAC-18.E1.3.12
Grande, Jøran	A	IAC-18.E1.8.5
Grandjean, Harish	CA	IAC-18.B3.9-GTS.2.3
Grant, Gregory	CA	IAC-18.B3.4-B6.4.12
Grant, Helen	CA	IAC-18.B3.3.1
Grasselli, Umberto	CA	IAC-18.C3.3.1
Grassi, Michele	CA	IAC-18.C1.3.5
Grassi, Michele	CA	IAC-18.D1.3.3
Grassi, Michele	CA	IAC-18.A6.5.8
Grassi, Michele	CA	IAC-18.B4.7.11
Graterol Nisi, Gabriel	CA	IAC-18.C2.9.6
Grau, Sebastian	CA	IAC-18.E1.4.4
Grau, Sebastian	A	IAC-18.C1.4.2
Grau, Sebastian	CA	IAC-18.E2.4.2
Graziani, Filippo	A	IAC-18.A6.IP.1
Graziano, Maria Daniela	CA	IAC-18.B4.7.11
Graça, David	CA	IAC-18.C2.9.9
Grebow, Daniel	CA	IAC-18.C1.8.9
Greco, Cristian	A	IAC-18.C1.8.5
Greco, Tom	CA	IAC-18.B3.4-B6.4.11
Green, Thomas	A	IAC-18.E7.2.9
Gregori, Roberta	CA	IAC-18.E3.6.5
Gregorio, Anna	CA	IAC-18.E3.3.4
Greif, Jonas	CA	IAC-18.A7.2.6
Grenouilleau, Jessica	CA	IAC-18.A3.1.10
Grenouilleau, Jessica	CA	IAC-18.A2.5.10
Gresser, Götz T.	CA	IAC-18.C2.9.1
Grevers, Dorothée	CA	IAC-18.A1.IP.21
Grevers, Dorothée	CA	IAC-18.A1.7.1
Grewal, Simranjit	A	IAC-18.C2.IP.3
Grey, Kent	CA	IAC-18.E7.2.9
Grieger, Bjoern	CA	IAC-18.A3.4A.5
Griffin, Douglas	CA	IAC-18.B4.6A.3
Griffith, Nathan	CA	IAC-18.A6.7.4
Grigoriadis, Karolos	CA	IAC-18.E1.8.3
Grigorieva, Olga	CA	IAC-18.A1.8.13
Grimm, Christian	A	IAC-18.A3.4B.2
Grimm, Christian	CA	IAC-18.A3.4B.6
Grimm, Daniela	CA	IAC-18.A1.IP.26
Grimm, Daniela	A	IAC-18.A1.8.7
Grimm, Daniela	CA	IAC-18.A1.8.8
Grimm, Daniela	CA	IAC-18.A1.8.9
Grimm, Daniela	CA	IAC-18.A2.7.11
Grishin, Alexey	CA	IAC-18.A1.2.6
Grishko, Dmitriy	CA	IAC-18.D1.IP.3
Griva, Iliana	CA	IAC-18.E7.IP.18
Groemer, Gernot	CA	IAC-18.E1.7.7
Grohmann, Elisabeth	CA	IAC-18.A1.3.18
Gros, Claudius	A	IAC-18.A7.1.8
Gros, Claudius	A	IAC-18.D4.4.3
Grosse, Doris	CA	IAC-18.B2.8-GTS.3.12
Grosse, Doris	A	IAC-18.A6.6.3
Grosse, Jens	CA	IAC-18.A2.1.13
Grosse, Jens	A	IAC-18.A2.3.4
Grosse, Jens	CA	IAC-18.A2.3.5
Grosse, Jens	CA	IAC-18.A2.IP.7
Grosser, Jan	CA	IAC-18.A1.3.20
Grosser, Jan	CA	IAC-18.A2.IP.5
Grosser, Jan	A	IAC-18.A1.7.8
Großhans, Jens	CA	IAC-18.B6.3.3
Großhans, Jens	CA	IAC-18.E1.4.4
Großhans, Jens	A	IAC-18.B2.6.6
Grossi, Armando	A	IAC-18.B4.1.8
Grossi, Armando	CA	IAC-18.B4.6B.10
Grossi, Lorenzo	A	IAC-18.C2.1.2
Grosso, Roberto	CA	IAC-18.E3.3.4
Grott, Matthias	CA	IAC-18.A3.4A.2
Grott, Matthias	CA	IAC-18.A3.5.3
Gruber, Sophie	A	IAC-18.E1.7.7
Grubisic, Angelo	CA	IAC-18.B1.IP.31
Grulich, Maria	CA	IAC-18.B3.9-GTS.2.10
Grundmann, Jan Thimo	CA	IAC-18.C2.1.7
Grundmann, Jan Thimo	CA	IAC-18.A3.4A.2
Grundmann, Jan Thimo	CA	IAC-18.C3.4.3
Grundmann, Jan Thimo	A	IAC-18.A3.4B.6
Gruntman, Mike	A	IAC-18.E1.4.11
Gruntman, Mike	A	IAC-18.E4.1.8
Gruntman, Mike	CA	IAC-18.D4.4.2
Grunwald, Gerhard	CA	IAC-18.B3.6-A5.3.3
Grunwald, Gerhard	CA	IAC-18.B3.6-A5.3.5
Grunwald, Gerhard	A	IAC-18.D1.6.3
Grunwald, Kira	CA	IAC-18.E2.3-GTS.4.1
Grunwald, Kira	CA	IAC-18.A2.IP.15
Grygorczuk, Jerzy	CA	IAC-18.A3.IP.37
Grygorczuk, Jerzy	CA	IAC-18.C2.IP.6
Grygorczuk, Jerzy	A	IAC-18.A3.5.3
Grygorczuk, Jerzy	CA	IAC-18.A3.4B.5
Grys, Szymon	CA	IAC-18.A5.1.6
Grzesik, Benjamin	A	IAC-18.C3.3.7
Grünefeld, Matthias	CA	IAC-18.B4.2.12
Gscheidle, Christian	CA	IAC-18.B4.6B.8
Gu, BonJu	CA	IAC-18.A3.IP.53
Gu, Haoran	CA	IAC-18.D1.4A.5
Gu, Haoran	CA	IAC-18.D2.8-A5.4.8
Guan, Yiwen	A	IAC-18.C4.2.3
Guardabasso, Paolo	CA	IAC-18.D4.1.8
Guardabasso, Paolo	A	IAC-18.A5.1.5
Guardabasso, Paolo	CA	IAC-18.A3.2C.4
Guardabasso, Paolo	CA	IAC-18.D2.8-A5.4.6
Guariniello, Cesare	A	IAC-18.D1.4A.6
Guarnieri, Vincenzo	CA	IAC-18.B3.7.5
Gubbini, Elena	CA	IAC-18.B3.3.12
Gueho, Damien	CA	IAC-18.A6.9.6
Guerman, Anna	CA	IAC-18.A3.IP.50
Guerman, Anna	CA	IAC-18.D4.IP.3
Guerra, Andre	CA	IAC-18.B5.2.13
Guerra, André	CA	IAC-18.A7.2.6
Guerra, Gonzalo	CA	IAC-18.D3.2.12
Guerra, Gonzalo	CA	IAC-18.D3.IP.2
Guerster, Markus	A	IAC-18.E2.3-GTS.4.9
Guerster, Markus	A	IAC-18.B3.2.9
Guery, Jean-Francois	A	IAC-18.C4.2.1
Guethler, Mark	CA	IAC-18.C4.IP.4
Guevara, Edgar	CA	IAC-18.B1.1.12
Guglieri, Giorgio	CA	IAC-18.C1.4.9
Guglieri, Giorgio	CA	IAC-18.D2.4.9
Gugliermetti, Franco	CA	IAC-18.C2.8.1
Gugliermetti, Luca	CA	IAC-18.A1.6.9
Gui, Haichao	A	IAC-18.C1.IP.13
Gui, Haichao	CA	IAC-18.A6.10-C1.7.3
Guillon, Herve	CA	IAC-18.B2.2.3
Guillot, Cécile	A	IAC-18.A1.1.9
Guiso, Gaia	CA	IAC-18.E3.IP.1
Guixing, Cao	CA	IAC-18.B2.1.9
Gujral, Akhil	A	IAC-18.D2.1.6
Gulab, Abdullah	CA	IAC-18.E2.3-GTS.4.7
Gulliver, Brian	A	IAC-18.E1.2.10
Gunga, Hanns-Christian	CA	IAC-18.A1.1.7
Gunga, Hanns-Christian	CA	IAC-18.A1.1.8
Gunga, Hanns-Christian	A	IAC-18.A1.2.10
Gunga, Hanns-Christian	CA	IAC-18.A1.2.11
Gunga, Hanns-Christian	CA	IAC-18.A1.2.13
Gunga, Hanns-Christian	CA	IAC-18.A1.2.24
Gunga, Hanns-Christian	CA	IAC-18.A1.4.4
Gunga, Hanns-Christian	CA	IAC-18.A1.4.6
Gunga, Hanns-Christian	CA	IAC-18.A1.4.7
Gunga, Hanns-Christian	CA	IAC-18.A1.4.12
Gunga, Hanns-Christian	CA	IAC-18.A1.4.19
Gunga, Hanns-Christian	CA	IAC-18.A1.4.21
Gunga, Hanns-Christian	CA	IAC-18.A1.IP.21
Gunga, Hanns-Christian	CA	IAC-18.A1.IP.22
Gunga, Hanns-Christian	CA	IAC-18.A1.7.1
Guo, Aimin	CA	IAC-18.C2.IP.26
Guo, Canlin	CA	IAC-18.C4.IP.37
Guo, Chuanzelong	CA	IAC-18.D4.2.13
Guo, Feng	CA	IAC-18.A3.3B.2
Guo, Jian	CA	IAC-18.B4.6A.5
Guo, Jian	CA	IAC-18.C1.6.12
Guo, Jian	CA	IAC-18.D3.IP.4
Guo, Jian	CA	IAC-18.B4.6B.6
Guo, Jian	CA	IAC-18.B4.7.2
Guo, Ming	CA	IAC-18.D4.1.5
Guo, Ming	CA	IAC-18.A7.3.11
Guo, Xiaohua	CA	IAC-18.D1.5.7
Guo, Yalin	A	IAC-18.C2.4.9
Gupta, Aanchal	CA	IAC-18.D6.3.1
Gupta, Avni	CA	IAC-18.A1.3.5
Gupta, Chakshu	A	IAC-18.B6.1.3
Gupta, Neeraj	A	IAC-18.E5.1.1
Gupta, Neeraj	CA	IAC-18.D2.4.7
Gupta, Pradeep Kumar	CA	IAC-18.B2.2.6
Gupta, Pradeep Kumar	CA	IAC-18.B2.2.9
Gupta, Subham Kumar	CA	IAC-18.E2.3-GTS.4.11
Gupta, Taavishe	A	IAC-18.C3.4.9
Gurfil, Pini	CA	IAC-18.B2.5.8
Gurgel Veras, Carlos Alberto	CA	IAC-18.C4.2.10
Gurgurewicz, Joanna	CA	IAC-18.A3.IP.37
Guru, Mahish	CA	IAC-18.A3.3B.12
Gurumoorthy, Ramanathan	CA	IAC-18.D2.5.12
Gurvits, Leonid	A	IAC-18.A7.2.8
Gusev, Vladislav	CA	IAC-18.A6.IP.5
Gushin, Vadim	A	IAC-18.A1.1.10
Gushin, Vadim	CA	IAC-18.A1.1.11
Gushin, Vadim	CA	IAC-18.A1.1.12
Gustafsond, Eric	CA	IAC-18.B4.8.4
Gustetic, Jennifer	A	IAC-18.E6.2.5
Gut, Zbigniew	CA	IAC-18.C4.IP.9
Gutierrez, Gonzalo	CA	IAC-18.E2.3-GTS.4.9
Gutierrez Ahumada, Jose Angel	CA	IAC-18.B4.6B.11
Gutman, Vera	CA	IAC-18.D5.IP.2
Gutsch, Franz	CA	IAC-18.A2.1.9
Guven, Ugur	CA	IAC-18.C3.1.3
Guven, Ugur	A	IAC-18.D2.2.13
Guven, Ugur	CA	IAC-18.D3.2.9
Guven, Ugur	CA	IAC-18.A1.IP.20
Guven, Ugur	CA	IAC-18.A3.IP.67
Guven, Ugur	A	IAC-18.A4.IP.4
Guven, Ugur	CA	IAC-18.A4.IP.7
Guven, Ugur	CA	IAC-18.D3.IP.5
Guven, Ugur	CA	IAC-18.D4.IP.1
Guven, Ugur	CA	IAC-18.C3.4.8
Guven, Ugur	CA	IAC-18.C3.4.9
Guven, Ugur	CA	IAC-18.C4.6.11
Guven, Ugur	A	IAC-18.D4.4.8
Guven, Ugur	A	IAC-18.A4.2.6
Guven, Ugur	CA	IAC-18.A4.2.11
Guven, Ugur	CA	IAC-18.D4.5.12
Guy, Nathaniel	CA	IAC-18.C1.8.12
Guzman Gomez, Camilo	A	IAC-18.E3.1.5
Guzman Gomez, Camilo	A	IAC-18.E5.5.9
Gyawali, Prabin	A	IAC-18.B2.8-GTS.3.6
Gybels, Dylan	CA	IAC-18.C2.8.3
Gásquez García, Oriol	CA	IAC-18.A3.IP.23
Gärtner, Thomas	CA	IAC-18.B4.6A.8
Gómez, Celina	CA	IAC-18.A1.7.16
Güldal, Sezin	CA	IAC-18.E1.IP.24
Gülhan, Ali	CA	IAC-18.A6.2.5
Gülhan, Ali	A	IAC-18.A3.3B.11

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Name	Role	Paper
Haarlammert, Thorben	CA	IAC-18.B2.IP.21
Habbassi, Idris	CA	IAC-18.C4.4.9
Hablani, Hari	CA	IAC-18.C1.4.12
Habu, Hiroto	CA	IAC-18.D2.7.2
Habu, Hiroto	CA	IAC-18.B4.5.2
Hacene Lhadj, Karim	A	IAC-18.D4.1.8
Hacene Lhadj, Karim	CA	IAC-18.A5.1.5
Hacene Lhadj, Karim	CA	IAC-18.D2.8-A5.4.6
Hacene Lhadj, Karim	A	IAC-18.B4.7.9
Hackel, Stefan	A	IAC-18.B6.1.1
Hackett, John	CA	IAC-18.A3.2B.6
Hadaegh, Fred	CA	IAC-18.C1.6.3
Haddaji, Alissa	A	IAC-18.A3.5.11
Hadji Hossein, Shariar	CA	IAC-18.A6.9.8
Hadji Hossein, Shariar	CA	IAC-18.A6.IP.36
Haemmerli, Bastien	CA	IAC-18.D2.7.6
Haemmerli, Bastien	CA	IAC-18.D2.7.8
Haeseler, Dietrich	A	IAC-18.C4.1.4
Haeuplik-Meusburger, Sandra	CA	IAC-18.E1.4.10
Haeuplik-Meusburger, Sandra	CA	IAC-18.E5.1.4
Haeuplik-Meusburger, Sandra	CA	IAC-18.E5.1.10
Haeuplik-Meusburger, Sandra	A	IAC-18.A1.4.18
Haeuplik-Meusburger, Sandra	A	IAC-18.A5.1.8
Hagemann, Gerald	A	IAC-18.C4.1.1
Hagemann, Lars	CA	IAC-18.D2.IP.11
Hagemeister, Doreen	A	IAC-18.E1.1.2
Hagemeister, Doreen	A	IAC-18.E1.2.12
Hagenfeldt, Miguel	A	IAC-18.C1.5.5
Hagenfeldt, Miguel	CA	IAC-18.C1.5.10
Haghshenas, Javad	CA	IAC-18.E5.4.5
Hagolle, Olivier	CA	IAC-18.B1.1.4
Hahn, Robson	A	IAC-18.C4.IP.46
Haichuan, Yu	CA	IAC-18.A6.IP.38
Haider, Olivia	CA	IAC-18.E1.7.7
Haigh, Sarah	CA	IAC-18.B4.2.2
Haigh, Sarah	CA	IAC-18.C4.6.4
Haigneré, Claudie	CA	IAC-18.A3.1.5
Hainaut, Jean-Philippe	CA	IAC-18.A1.1.9
Haines, Agatha	CA	IAC-18.A1.3.7
Haines, Sarah	CA	IAC-18.A2.7.13
haipeng chen, haipeng chen	CA	IAC-18.D2.IP.8
Haixiao, Zhuang	CA	IAC-18.B1.IP.1
Hakamada, Shinya	CA	IAC-18.A2.4.11
Halaburda, Dmitriy	CA	IAC-18.D2.4.2
Halcro, Hannah	A	IAC-18.E5.3.6
Haldemann, Albert	CA	IAC-18.A3.3A.3
Hall, Alexander	CA	IAC-18.A6.5.1
Hall, Hunter	A	IAC-18.E2.3-GTS.4.6
Hall, James	CA	IAC-18.C3.4.5
Halle, Winfried	CA	IAC-18.A6.10-C1.7.7
Halma, Rithesh	CA	IAC-18.E2.4.12
Hamara, Michal	CA	IAC-18.A6.IP.6
Hambuchen, Kimberly	CA	IAC-18.B3.6-A5.3.3
Hameed, Hamza	A	IAC-18.E7.1.6
Hameed, Hamza	CA	IAC-18.E7.2.4
Hamel, Jean-Francois	A	IAC-18.A3.2A.3
Hamel, Jean-Francois	CA	IAC-18.A7.3.2
Hamilton, Patrick	CA	IAC-18.B2.5.1
Hampe, Jens	CA	IAC-18.B2.5.4
Hampe, Jens	CA	IAC-18.D6.3.3
Hampe, Jens	CA	IAC-18.D6.3.9
Hampf, Daniel	A	IAC-18.B6.1.8
Hampp, Elias	CA	IAC-18.D3.3.10
Han, Chao	CA	IAC-18.D1.4A.5
Han, Da wei	CA	IAC-18.A6.IP.42
Han, Fei	CA	IAC-18.B4.7.7
HAN, PEI	A	IAC-18.A2.7.2
Han, Qiuyang	CA	IAC-18.D2.8-A5.4.11
Han, Xingsi	A	IAC-18.C4.9.15
Hanada, Toshiya	CA	IAC-18.A6.2.2
Hanada, Toshiya	CA	IAC-18.B4.9-GTS.5.1
Handley, Harrison	A	IAC-18.E2.3-GTS.4.10
Hang, Guanrong	CA	IAC-18.C4.IP.42
Hang, Shuang	A	IAC-18.A4.1.8
Hangai, Masatake	CA	IAC-18.C3.2.8
Hannemann, Klaus	A	IAC-18.C4.9.1
Hans, Michael	CA	IAC-18.D1.4B.1
Hanson, Berenike	CA	IAC-18.D1.1.1
Hao, Xuetao	CA	IAC-18.B5.3.10
Hao, Zhang	CA	IAC-18.D2.IP.8
Hara, Kentaro	CA	IAC-18.B4.2.9
Harald, Hiesinger	CA	IAC-18.A3.1.10
Harald, Hiesinger	CA	IAC-18.A3.1.12
Harasymczuk, Matt	CA	IAC-18.E1.7.9

Harasymczuk, Matt	CA	IAC-18.A1.IP.10
Harasymczuk, Matt	A	IAC-18.B3.IP.5
Harclerode, Ken	CA	IAC-18.A3.4B.8
Hardouin, Guillaume	CA	IAC-18.E2.3-GTS.4.2
Hardy, Emilie	CA	IAC-18.A2.1.1
Hargarten, Dorian	A	IAC-18.C4.6.12
Harkness, Patrick	CA	IAC-18.C4.8-B4.5A.13
Harnett, Erika	CA	IAC-18.E1.2.6
Harney, Maria	CA	IAC-18.A1.4.3
Harney, Maria	CA	IAC-18.E5.IP.10
Harr, Jon	A	IAC-18.B4.4.2
Harrington, Andrea	CA	IAC-18.D3.1.3
Harrington, Andrea	CA	IAC-18.E1.4.2
Harrington, Andrea	CA	IAC-18.A5.1.10
Harrington, Andrea	A	IAC-18.D2.9-D6.2.3
Harrington, Elise	A	IAC-18.A1.7.18
Harris, Andrew	CA	IAC-18.C1.6.2
Harris, Laurence	CA	IAC-18.A1.8.4
Harris, Toby	A	IAC-18.A6.IP.14
Harrison, Ian	CA	IAC-18.B6.3.1
Harrison, Michael	CA	IAC-18.E1.IP.32
Hartely, Tom	CA	IAC-18.A1.4.19
Harth, Kirsten	CA	IAC-18.A2.2.12
Hartman, Birgit	A	IAC-18.E1.5.2
Hartman, Colleen	A	IAC-18.A7.1.3
Hartman, Colleen	CA	IAC-18.D1.5.2
Hartstein, Heinz	CA	IAC-18.A1.7.4
Hartstein, Heinz	CA	IAC-18.A1.7.6
Hartwell, William	CA	IAC-18.B3.1.2
Hartwich, Ruediger	CA	IAC-18.B3.7.1
Haseba, Shuichi	CA	IAC-18.A6.3.2
Hasegawa, Koji	CA	IAC-18.A2.4.9
Hasegawa, Koji	CA	IAC-18.A2.4.10
Hasegawa, Toshiki	A	IAC-18.B3.2.7
Hasenohr, Thomas	CA	IAC-18.B6.1.8
Hashimoto, Junichi	CA	IAC-18.C4.2.2
Hashimoto, Mikiko	CA	IAC-18.D4.2.8
Hashimoto, Tatsuaki	A	IAC-18.A3.IP.9
Hasome, Hiromichi	CA	IAC-18.A2.2.3
Hassan, Abdelrahman	CA	IAC-18.D1.4B.3
HASSIN, Jérémie	CA	IAC-18.D2.5.3
Hatfield, Sara	CA	IAC-18.E1.2.6
Hatton, Jason	CA	IAC-18.B3.3.3
Haun, Peter	CA	IAC-18.A2.7.18
Hauschildt, Jakob	CA	IAC-18.D5.3.10
Hauslage, Jens	CA	IAC-18.A1.7.17
Havlik, Petr	CA	IAC-18.E3.1.14
Haw, Robert	CA	IAC-18.B4.8.4
Hay, Craig	CA	IAC-18.A5.1.6
Haya Ramos, Rodrigo	A	IAC-18.D2.5.2
Hayashi, Daisuke	CA	IAC-18.C2.5.2
Haylock, Thomas	A	IAC-18.D1.5.1
HE, Changyong	A	IAC-18.A6.9.2
He, Falong	A	IAC-18.A2.2.10
He, Jiang	CA	IAC-18.A2.2.10
He, Liang	CA	IAC-18.B4.7.7
He, Wei	CA	IAC-18.B2.IP.10
He, Wei	CA	IAC-18.C1.IP.14
He, Weiqiang	CA	IAC-18.D1.IP.18
He, Weiqiang	CA	IAC-18.C2.8.12
He, Yinyan	CA	IAC-18.D1.1.7
He, YueLong	CA	IAC-18.A6.IP.38
He, Zhanzhuang	CA	IAC-18.D4.IP.4
He, Zhenzong	CA	IAC-18.C4.9.15
Healey, Elisabeth	CA	IAC-18.B5.2.1
Healy, Matthew	A	IAC-18.B3.4-B6.4.6
HECHT, Ulrike	CA	IAC-18.A2.6.13
Heckert, Blaze	A	IAC-18.C2.5.7
Heelis, Rod	CA	IAC-18.B4.2.9
Heffernan, Luke	CA	IAC-18.B2.8-GTS.3.3
Heffernan, Luke	A	IAC-18.B2.8-GTS.3.11
Hefkey, Jim	A	IAC-18.E1.3.1
Hegde, Kai Maitreya	CA	IAC-18.A1.8.5
Hegde, Pramoda	CA	IAC-18.B6.2.9
Heider, Brian	CA	IAC-18.B1.2.8
Heilmann, Christoph	CA	IAC-18.B3.IP.9
Heim, Craig	CA	IAC-18.D2.8-A5.4.4
Hein, Andreas Makoto	A	IAC-18.D4.5.11
Hein, Andreas Makoto	A	IAC-18.D4.5.14
Heine, Frank	CA	IAC-18.B2.7.1
Heine, Thomas	CA	IAC-18.B4.2.9
Heinicke, Christiane	CA	IAC-18.B6.3.4
Heinicke, Christiane	CA	IAC-18.A5.2.15
Heinicke, Christiane	A	IAC-18.A5.1.14
Heinicke, Christiane	CA	IAC-18.B3.6-A5.3.10
Heinicke, Christiane	A	IAC-18.A3.2C.8
Heintzmann, Pascal	CA	IAC-18.A2.6.15
Heintzmann, Pascal	CA	IAC-18.A2.7.18
Heinz, Nicolas	CA	IAC-18.E2.3-GTS.4.1
Heißerer, Barbara	CA	IAC-18.B4.2.2
Heißerer, Barbara	CA	IAC-18.C4.6.4
Helbig, Olivier	A	IAC-18.E4.3A.3
Held, Alex	CA	IAC-18.B4.4.12
Held, Alex	CA	IAC-18.D4.2.2
Held, Alex	CA	IAC-18.E3.3.1
Helisch, Harald	CA	IAC-18.E1.3.8
Helisch, Harald	CA	IAC-18.A1.7.4
Helisch, Harald	CA	IAC-18.A1.7.6
Hell, Mathias	CA	IAC-18.E2.3-GTS.4.1
Hellbourg, Greg	CA	IAC-18.A4.1.9
Hellbourg, Greg	CA	IAC-18.A4.1.11
Hellmann, Harald	A	IAC-18.A7.2.7
Hellmig, Ortwin	CA	IAC-18.A2.1.8
Hellweg, Christine	CA	IAC-18.A1.5.7
Hellweg, Christine	CA	IAC-18.A2.7.15
Helm, Achim	CA	IAC-18.A2.1.4
Helms, Tristan	CA	IAC-18.B2.8-GTS.3.1
HELVACILAR, Buket Helin	CA	IAC-18.E1.IP.24
HELVACILAR, Buket Helin	A	IAC-18.E1.1.14
Helwig, Andreas	CA	IAC-18.A2.IP.5
Hemmersbach, Ruth	CA	IAC-18.A1.8.7
Hemmersbach, Ruth	CA	IAC-18.A2.7.11
Hempsell, Mark	A	IAC-18.C4.7-C3.5.13
Hendrick, Patrick	CA	IAC-18.C4.5.12
Hendrick, Patrick	CA	IAC-18.C4.IP.17
Henkel, Maximilian	CA	IAC-18.B2.IP.18
Henn, Norbert	CA	IAC-18.D4.2.9
Henn, Norbert	CA	IAC-18.A1.7.4
Henn, Norbert	CA	IAC-18.A1.7.6
Henning, Greg	CA	IAC-18.A6.7.6
Henninger, Ashley	CA	IAC-18.B3.4-B6.4.6
Henri, Yvon	A	IAC-18.E7.2.12
Henriquez Camacho, Gustavo	CA	IAC-18.B1.1.12
Henry, David	CA	IAC-18.D1.3.1
Henry, David	CA	IAC-18.D1.6.10
Henry, Gwenole	CA	IAC-18.D3.2.12
Henry, Gwenole	CA	IAC-18.D3.IP.2
Hensel, René	CA	IAC-18.C2.5.4
Heo, Seonuk	CA	IAC-18.C4.IP.52
Hercik, David	CA	IAC-18.A3.4A.2
Hercik, David	CA	IAC-18.A3.4B.6
Herd, Andrew	A	IAC-18.D1.5.4
Herdrich, Georg	CA	IAC-18.C2.4.5
Herdrich, Georg	CA	IAC-18.C2.4.8
Herdrich, Georg	CA	IAC-18.A2.5.2
Herdrich, Georg	CA	IAC-18.C4.6.4
Herdrich, Georg	CA	IAC-18.C4.7-C3.5.12
Herdrich, Georg H.	CA	IAC-18.B4.2.2
Herdrich, Georg H.	CA	IAC-18.E2.3-GTS.4.1
Herdrich, Georg H.	CA	IAC-18.B4.6A.12
Herdrich, Georg H.	CA	IAC-18.A2.IP.15
Herdrich, Georg H.	CA	IAC-18.D2.IP.16
Hermanson, Jim	CA	IAC-18.A2.2.7
Hermosin, Pablo	CA	IAC-18.A3.3A.5
Hermosin, Pablo	CA	IAC-18.C1.5.5
Hermosin, Pablo	A	IAC-18.C1.9.2
Hernandez, Marcos	CA	IAC-18.B4.1.4
Hernandez, Marcos	CA	IAC-18.E2.1.5
Hernandez, Matias	CA	IAC-18.A3.2A.3
Hernandez, Stephan	CA	IAC-18.D3.4.5
Hernando-Ayuso, Javier	CA	IAC-18.D1.2.4
Hernando-Ayuso, Javier	CA	IAC-18.C1.3.2
Hernández, Juan	CA	IAC-18.D3.4.11
Hernández Pérez, Brenda Patricia	CA	IAC-18.A3.IP.7
Herpers, Rainer	A	IAC-18.A1.8.4
Herr, Waldemar	CA	IAC-18.A2.1.11
Herr, Waldemar	A	IAC-18.A2.1.12
Herranz, Raul	A	IAC-18.A1.8.17
Herranz, Raul	CA	IAC-18.A2.7.17
Herrmann, Nicole	CA	IAC-18.A5.1.1
Herrmann, Sven	CA	IAC-18.A2.1.3
Herrmann, Sven	CA	IAC-18.A2.1.11
Herrmann, Sven	CA	IAC-18.A2.1.15
HERSCOVITZ, Jacob	CA	IAC-18.B1.1.4
Hertel, Victor	CA	IAC-18.E2.3-GTS.4.1
Hertzfeld, Henry	A	IAC-18.E7.5.13
Herzing, Denise	CA	IAC-18.A4.2.2
Herzog, Johannes	CA	IAC-18.A6.1.6
Herzog, Johannes	A	IAC-18.A6.9.7
Heshani, Uthpala	CA	IAC-18.B3.9-GTS.2.5
Hess, Larry	CA	IAC-18.A7.3.8
Hess, Marc Peter	A	IAC-18.A2.1.4
Hess, Marc Peter	CA	IAC-18.A3.2B.8
Hess, Marc Peter	CA	IAC-18.D4.2.9
Hesselbach, Sebastian	CA	IAC-18.A6.2.6
Hestroffer, Daniel	CA	IAC-18.C1.2.8
Hettrich, Sebastian	CA	IAC-18.E6.1.5
Hettrich, Sebastian	CA	IAC-18.A1.4.3
Hettrich, Sebastian	CA	IAC-18.A5.1.9
Hettrich, Sebastian	CA	IAC-18.B3.6-A5.3.10
Heumüller, Philipp	CA	IAC-18.A7.3.3
Hickerson, Jeffrey	CA	IAC-18.D2.4.7
Hild, Franziska	A	IAC-18.E2.3-GTS.4.1
Hild, Franziska	CA	IAC-18.A2.IP.15
Hill-Lam, Benjamin	A	IAC-18.C4.5.17
Hillebrandt, Martin	CA	IAC-18.C3.4.3
Hillenius, Steven	CA	IAC-18.B3.4-B6.4.6
Hinder, Jan	CA	IAC-18.D3.3.10
Hinkley, Jeffrey	CA	IAC-18.C2.6.2
Hinterman, Eric	A	IAC-18.A5.2.9
Hinze, Andreas	CA	IAC-18.A6.1.6
Hipwell, Cristian	CA	IAC-18.A5.1.5
Hirai, Yasuhito	CA	IAC-18.A1.1.6
Hirako, Keiichi	CA	IAC-18.C3.4.6
Hirasawa, Ryo	CA	IAC-18.D4.2.8
Hirn, Attila	CA	IAC-18.A1.5.2
Hirn, Attila	A	IAC-18.A1.5.11
Hisadome, Yasushi	CA	IAC-18.B3.3.6
Hitz, Emily	A	IAC-18.C3.3.2
Hjalmar Hansen, Arne	CA	IAC-18.E1.3.12
Ho, David Lit Xian	CA	IAC-18.E5.2.10
Ho, Tra Mi	A	IAC-18.A3.4A.2
Ho, Tra Mi	CA	IAC-18.A3.4B.6
Hoa, Suong	CA	IAC-18.C2.9.7
Hoban, Libby	A	IAC-18.B4.9-GTS.5.9
Hobbie, Catherin	CA	IAC-18.D1.4B.7
Hobbs, Stephen	CA	IAC-18.E2.3-GTS.4.5
Hobbs, Stephen	A	IAC-18.B1.2.12
Hobe, Stephan	A	IAC-18.E7.5.1
Hobe, Stephan	CA	IAC-18.E7.5.16
Hochstaetter, Jorg	CA	IAC-18.B3.5.1
Hodam, Henryk	CA	IAC-18.E1.2.1
Hofer, Richard	CA	IAC-18.C4.4.1
Hofer, Stefan	CA	IAC-18.B2.7.10
Hoffman, Jeffrey	CA	IAC-18.A5.2.9
Hoffman, Stephen	CA	IAC-18.A3.1.3
Hoffman, Tom	CA	IAC-18.A3.3A.1
Hoffmann, Fabian	A	IAC-18.A1.2.2
Hoffmann, Jörn	CA	IAC-18.B1.4.2
Hoffmann, Lucien	CA	IAC-18.E1.5.8
Hoffmann, Uwe	A	IAC-18.A1.2.7
Hoffmann, Uwe	CA	IAC-18.A1.2.8
Hofmann, Christian	CA	IAC-18.B2.1.1
Hofmann, Mahulena	A	IAC-18.E7.3.12
Hofmann, Sonja	CA	IAC-18.E2.3-GTS.4.1
Hofstadter, Mark	CA	IAC-18.A3.5.6
Hoheneder, Waltraut	CA	IAC-18.E5.1.6
Hoheneder, Waltraut	CA	IAC-18.B3.7.14
Hohmann, Sören	CA	IAC-18.A3.2A.8
Hokamoto, Shinji	CA	IAC-18.C1.1.9
Hokamoto, Shinji	CA	IAC-18.C1.4.4
Hokamoto, Shinji	CA	IAC-18.C1.6.5
Holbrough, Ian	CA	IAC-18.A6.4.6
Holley, Vincent	CA	IAC-18.D1.2.6
Hollick, Monique	A	IAC-18.B4.3.7
Holmes, Zachary	CA	IAC-18.B2.8-GTS.3.3
Holmes, Zachary	CA	IAC-18.B2.8-GTS.3.11
Holst, Rasmus	A	IAC-18.B4.6B.11
Holtmann, Peter	CA	IAC-18.C4.4.5
Holzbauer, Roland	CA	IAC-18.C2.5.4
Holzinger, Marcus	CA	IAC-18.A6.10-C1.7.5
Holzwarth, Ronald	CA	IAC-18.A2.1.9
Holzwarth, Stefanie	CA	IAC-18.B1.4.2
Homakova, Olga	CA	IAC-18.E1.4.4
Homma, Yukihiro	CA	IAC-18.C3.2.8
Hong, Ming-Yang	A	IAC-18.E2.1.4
Hong, Ming-Yang	CA	IAC-18.E2.4.5
Hong, Yanji	CA	IAC-18.C4.9.11
Hong, Yanji	CA	IAC-18.C4.IP.15
Hongbin, SHI	CA	IAC-18.C4.IP.56
Hongxing, Zhang	CA	IAC-18.A2.2.10
Hongyu, Chen	CA	IAC-18.C4.IP.36
Hongyu, Chen	CA	IAC-18.C4.IP.37
Honne, Atle	CA	IAC-18.B3.7.4
Honold, Hans-Peter	CA	IAC-18.B1.2.8
Hoogeveen, Ruud	CA	IAC-18.B1.3.1
Hook, Robert	A	IAC-18.B1.IP.9
Hooper, Jack	CA	IAC-18.D3.1.8
Hooper, Jack	A	IAC-18.D2.2.8
Horack, John M.	CA	IAC-18.B1.5.6
Horack, John M.	CA	IAC-18.B1.5.10
Horack, John M.	CA	IAC-18.B1.IP.28
Horack, John M.	CA	IAC-18.C4.6.8
Horack, John M.	CA	IAC-18.C4.7-C3.5.3
Horack, John M.	CA	IAC-18.C4.7-C3.5.10
Horack, John M.	CA	IAC-18.D2.8-A5.4.4
Horack, John M.	CA	IAC-18.D2.8-A5.4.5
Horack, John M.	CA	IAC-18.E3.6.11
Horack, John M.	CA	IAC-18.A2.7.13
Horack, John M.	CA	IAC-18.E7.7-B3.8.2
Hori, Daisuke	CA	IAC-18.A1.1.6
Hori, Keiichi	CA	IAC-18.C4.2.2
Horikawa, Yuta	CA	IAC-18.C4.IP.31
Hormigo, Tiago	CA	IAC-18.A3.3B.7
Hornbostel, Klaus	CA	IAC-18.A3.2A.3
Hornig, Andreas	A	IAC-18.B4.3.8
Horstmann, Andre	CA	IAC-18.A6.2.6
Horstmann, Andre	CA	IAC-18.A6.3.5
Horstmann, Birger	A	IAC-18.C3.3.4
Hoschke, Klaus	CA	IAC-18.C2.5.11
Hosford, Steven	CA	IAC-18.B1.1.1
Hoshino, Takeshi	A	IAC-18.A3.2A.6
Hosokawa, Kazuma	CA	IAC-18.D3.1.2
Hossein, Amin	CA	IAC-18.A1.2.5
Hosseini, Shahrzad	CA	IAC-18.A3.1.10
Hosseini, Shahrzad	A	IAC-18.B3.6-A5.3.7
Hosseini Aria, Enayat	CA	IAC-18.B4.4.7
Hou, Xinbin	A	IAC-18.C3.1.5
Houdou, Berengere	CA	IAC-18.A3.2B.2
Hovland, Scott	CA	IAC-18.B3.7.1
Hovland, Scott	CA	IAC-18.B3.7.4
Howard, Diane	CA	IAC-18.E1.3.10
Howard, Diane	CA	IAC-18.E1.3.10
Howard, Diane	CA	IAC-18.D6.1.4
Howard, Ryan	CA	IAC-18.D2.8-A5.4.4
Howe, Brock	A	IAC-18.D3.2.3
Howell, Kathleen	CA	IAC-18.D1.4A.6
Howell, Kathleen	CA	IAC-18.C1.8.9
Howell, Kathleen	CA	IAC-18.C1.9.1
Howlader, Ridwan	CA	IAC-18.E2.3-GTS.4.7

Hrnjic, Vildana	CA	IAC-18.C3.IP.3
Hruby, Jaroslav	A	IAC-18.C2.8.3
Hrynyk, Tyler	CA	IAC-18.E1.IP.1
Hu, Min	A	IAC-18.B2.8-GTS.3.4
Hu, Wenjing	A	IAC-18.B4.8.16
Hu, Wenjing	CA	IAC-18.D4.4.14
Huang, Arthur	A	IAC-18.D5.2.13
Huang, Dedong	A	IAC-18.C2.5.8
Huang, Jie	CA	IAC-18.A6.3.6
Huang, Jie	CA	IAC-18.A6.IP.17
Huang, Jie	CA	IAC-18.A6.IP.20
Huang, Jie	CA	IAC-18.A6.IP.20
Huang, Jin	CA	IAC-18.D1.3.7
Huang, Ming-Xian	A	IAC-18.E2.4.5
Huang, Qiang	CA	IAC-18.C4.IP.32
Huang, Shan	CA	IAC-18.B2.3.8
Huang, Shan	A	IAC-18.B5.3.8
Huang, Yanhui	CA	IAC-18.C3.IP.10
Huang, Yuping	CA	IAC-18.A6.6.9
Huber, Camille	CA	IAC-18.D3.3.10
Huber, Felix	CA	IAC-18.B6.2.10
Huber, Peter	CA	IAC-18.A2.6.3
Huber, Reto	CA	IAC-18.A1.IP.34
Huelsmann, Maren	A	IAC-18.A6.10-C1.7.7
Huermann, Brian	CA	IAC-18.B3.1.2
Huerta Ramírez, Sofía Andrea	A	IAC-18.E5.2.5
Hueser, Detlev	A	IAC-18.B3.2.10
Huesing, Jakob	A	IAC-18.A3.3A.6
Hufenbach, Bernhard	CA	IAC-18.A3.1.1
Hufenbach, Bernhard	CA	IAC-18.A3.1.10
Hufenbach, Bernhard	A	IAC-18.B3.1.6
Hufenbach, Bernhard	CA	IAC-18.A3.2A.10
Hufenbach, Bernhard	CA	IAC-18.A3.2B.7
Hufenbach, Bernhard	CA	IAC-18.B4.5.13
Huggins, Callum	CA	IAC-18.A5.1.5
Hughes, Jed	CA	IAC-18.E1.4.7
Hughes, Joseph	A	IAC-18.A6.10-C1.7.6
Huh, Hwanil	CA	IAC-18.C4.IP.43
Huh, Jeongmoo	A	IAC-18.C4.IP.2
hui min, Zhao	A	IAC-18.B1.IP.30
Hulier, Jean-Pierre	CA	IAC-18.D5.2.6
Hulier, Jean-Pierre	CA	IAC-18.D1.5.3
Hulin, Thomas	CA	IAC-18.D1.1.9
Hummel, Thomas	CA	IAC-18.A1.3.20
Hummel, Thomas	CA	IAC-18.A1.6.11
Hummel, Thomas	CA	IAC-18.A2.IP.5
Hummel, Thomas	CA	IAC-18.A1.7.8
Huneycutt, Taylor	A	IAC-18.D2.8-A5.4.4
Hurley, Aisling	CA	IAC-18.D3.2.5
Hurot, Thomas	CA	IAC-18.C4.6.3
Hurowitz, Michael	CA	IAC-18.B4.9-GTS.5.8
Hurrell, James	CA	IAC-18.D4.4.13
Hurrell, James	CA	IAC-18.D4.4.14
Hussain, Syed Shah Irfan	CA	IAC-18.B2.7.6
Hussein, Hatem Alaa	A	IAC-18.A3.2C.7
Hussein, Hesham	CA	IAC-18.A1.5.10
Hussein, Islam	CA	IAC-18.A6.9.4
Hussein, Islam	CA	IAC-18.A6.IP.9
Hutsch, Thomas	CA	IAC-18.C2.8.8
Hutter, Marco	CA	IAC-18.D3.3.10
Huynh, Adelyne	CA	IAC-18.E1.4.7
Huynh, Nancy	CA	IAC-18.B2.1.5
Huzain, M. Farid	CA	IAC-18.C2.IP.25
Hwang, Seolhui	CA	IAC-18.C2.IP.20
Hwang, Susie	CA	IAC-18.E1.4.7
Hyde, James	CA	IAC-18.A6.3.8
HYERS, Robert	CA	IAC-18.A2.6.13
Hyodo, Shoyo	CA	IAC-18.D2.2.1
Hyslop, Andrew	CA	IAC-18.C1.IP.33
Häming, Anna	CA	IAC-18.C2.1.8
Häming, Marc	A	IAC-18.A3.2B.8
Höffgen, Stefan	CA	IAC-18.C2.6.3
Höffgen, Stefan	CA	IAC-18.D5.3.2
Höflinger, Kilian	CA	IAC-18.B4.6A.8
Höfner, Kai	A	IAC-18.D6.1.9
Höfner, Kai	A	IAC-18.D1.IP.20
Hörmer, Andreas Johann	CA	IAC-18.B4.6B.4
Hörmer, Andreas Johann	CA	IAC-18.B2.7.8

I

Name	Role	Paper
Iacobellis, Michele	CA	IAC-18.B6.3.9
Iacomino, Clelia	CA	IAC-18.B5.2.1
Iacomino, Clelia	A	IAC-18.E3.IP.8
Iannelli, Paolo	CA	IAC-18.D1.IP.5
Ianniello, Alessio	CA	IAC-18.D3.IP.7
Iannitti, Stefano	CA	IAC-18.B2.5.1
Iastrebova, Irina	CA	IAC-18.E2.4.8
Ibitolu, Henry	CA	IAC-18.E1.5.7
Ibitolu, Henry	CA	IAC-18.B1.IP.25
Ibitolu, Henry	A	IAC-18.E1.2.2
Ibrahim, Rami	CA	IAC-18.B2.3.8
Ibrahim, Rami	CA	IAC-18.E5.4.9
Ibrahim, Syeda Atika	CA	IAC-18.D1.1.6
Ichimura, Kotaro	CA	IAC-18.C4.2.2
Ichinomiya, Kento	CA	IAC-18.C1.9.10
Ideström, Johan	A	IAC-18.D5.3.5
Iermano, Fabio	CA	IAC-18.C2.8.5
Ieronymaki, Maria	CA	IAC-18.B5.1.7
Iervese, Francesco	CA	IAC-18.B4.8.1
Ignateva, Anastasiia	CA	IAC-18.E2.4.8
Ignjatovic Stupar, Danijela	A	IAC-18.B2.3.3
Ignjatovic Stupar, Danijela	CA	IAC-18.A3.IP.46
Iida, Teruhito	CA	IAC-18.A3.2C.9
Iida, Tsutomu	CA	IAC-18.D1.3.10
Iijima, Hirotaka	CA	IAC-18.A1.2.17
Ijichi, Koichi	CA	IAC-18.C3.4.6
Ikeda, Naruomi	CA	IAC-18.A5.1.6
IKI, Kentaro	CA	IAC-18.A6.6.5
ILIEV, Yasen	CA	IAC-18.B5.3.8
Ilyin, Viacheslav	A	IAC-18.A1.3.6
Ilyin, Viacheslav	A	IAC-18.A1.7.10
ILZKOVITZ, MICHEL	CA	IAC-18.D3.2.12
ILZKOVITZ, MICHEL	CA	IAC-18.D3.IP.2
Imaki, Kazuya	A	IAC-18.A3.IP.29
Imam, Rayan	CA	IAC-18.B2.8-GTS.3.12
Imamura, Shunsuke	A	IAC-18.C1.8.1
Imber, James	CA	IAC-18.B1.IP.19
Imbert, Mariano	CA	IAC-18.B1.1.8
Imhof, Anna Barbara	A	IAC-18.E5.1.6
Imhof, Anna Barbara	CA	IAC-18.E1.9.4
Imhof, Anna Barbara	A	IAC-18.B3.7.14
Imhof, Barbara	CA	IAC-18.D3.3.7
Imhof, Barbara	CA	IAC-18.E1.9.14
Impresario, Gabriele	CA	IAC-18.B3.9-GTS.2.14
Imura, Takehiro	CA	IAC-18.C3.2.7
In, Joong Hyun	CA	IAC-18.A3.5.6
Inaba, Noriyasu	CA	IAC-18.D1.1.4
INAGAWA, Takahiro	CA	IAC-18.D2.7.9
Inamdar, Karishma	A	IAC-18.E1.IP.29
Inamdar, Karishma	CA	IAC-18.B6.2.5
Inamori, Takaya	CA	IAC-18.E2.2.5
Inamori, Takaya	A	IAC-18.C1.5.4
Inamori, Takaya	CA	IAC-18.B4.8.15
Inatani, Yoshifumi	CA	IAC-18.B4.5.2
Inatani, Yoshifumi	CA	IAC-18.D2.5.7
Inbar, Tal	A	IAC-18.E4.2.8
Infanger, Manfred	CA	IAC-18.A1.IP.26
Infanger, Manfred	CA	IAC-18.A1.8.7
Infanger, Manfred	CA	IAC-18.A1.8.8
Infanger, Manfred	CA	IAC-18.A1.8.9
Infanger, Manfred	CA	IAC-18.A2.7.11
Inglis, Jayden	CA	IAC-18.B2.8-GTS.3.3
Inglis, Jayden	CA	IAC-18.B2.8-GTS.3.11
Innes, Daniel	CA	IAC-18.E2.3-GTS.4.11
Inoue, Fumihiro	A	IAC-18.D4.3.12
Inoue, Koichi	CA	IAC-18.C4.IP.31
Invigorito, Marco	CA	IAC-18.A5.2.11
Invigorito, Marco	CA	IAC-18.C4.4.14
Ioas, Stephen	CA	IAC-18.D2.8-A5.4.4
Iorio, Carlo	CA	IAC-18.C2.8.5
Ip-Jewell, Nicholas	CA	IAC-18.E6.1.5
Ip-Jewell, Nicholas	CA	IAC-18.E5.IP.10
Ip-Jewell, Nicholas	CA	IAC-18.E6.IP.4
Ip-Jewell, Susan	A	IAC-18.E6.1.5
Ip-Jewell, Susan	CA	IAC-18.A1.4.3
Ip-Jewell, Susan	CA	IAC-18.E6.IP.4
Irimies, David	CA	IAC-18.B3.1.8
Irvine, Stuart	CA	IAC-18.C3.4.5
Isaeva, Olga	CA	IAC-18.A1.2.3
Isasi Parache, Yago	CA	IAC-18.B5.2.6
Ishikawa, Yoji	A	IAC-18.D4.3.3
Ishikawa, Yoji	CA	IAC-18.D4.3.10
Ishikita, Naoyuki	CA	IAC-18.A1.4.3
Isvoranu, Dragos	CA	IAC-18.C4.9.12
Ito, Akira	CA	IAC-18.A1.2.17
Ito, Atsuyo	A	IAC-18.E7.3.8
Ito, Takahiro	A	IAC-18.D2.7.2
Ito, Takahiro	CA	IAC-18.B4.5.2
Ito, Takashi	CA	IAC-18.D2.5.7
Itogawa, Elisa	A	IAC-18.D1.IP.12
Ivanov, Alexey	CA	IAC-18.A3.3A.3
Ivanov, Anton	CA	IAC-18.A3.2A.7
Ivanov, Anton	CA	IAC-18.E1.4.3
Ivanov, Anton	CA	IAC-18.A5.2.7
Ivanov, Anton	CA	IAC-18.A7.2.6
Ivanov, Anton	CA	IAC-18.B5.2.10
Ivanov, Anton	CA	IAC-18.A3.IP.44
Ivanov, Anton	CA	IAC-18.B4.8.5
Ivanov, Anton	CA	IAC-18.D4.5.5
Ivanov, Danil	CA	IAC-18.B4.6B.3
Ivanov, Danil	A	IAC-18.B4.7.6
Ivanova, Alexandra	CA	IAC-18.D1.1.6
Ivanova, Olga	CA	IAC-18.A1.5.11
Iwakura, Sadao	CA	IAC-18.B4.5.2
Iwasa, Takashi	A	IAC-18.C2.2.1
Iwase, Satoshi	A	IAC-18.A1.2.16
Iwase, Satoshi	A	IAC-18.A1.3.1
Iwase, Satoshi	CA	IAC-18.A1.3.2
Iwata, Minoru	CA	IAC-18.D5.3.4
Iyomasa, Kazuhiro	CA	IAC-18.C3.2.8
Izmailov, Igor	CA	IAC-18.A6.IP.8
Izotova, Anastasia	CA	IAC-18.E5.3.8
Izotova, Anastasia	CA	IAC-18.E5.IP.4
Izquierdo, Pablo	CA	IAC-18.B5.2.13
Izzo, Dario	CA	IAC-18.C1.1.2
Izzo, Luigi Gennaro	CA	IAC-18.E1.3.6
Izzo, Luigi Gennaro	A	IAC-18.A1.7.16

J

Name	Role	Paper
J, Jayaprakash	CA	IAC-18.C2.IP.33
J, Paul Murugan	A	IAC-18.C2.IP.33
J.A., Gonzales del Amo	CA	IAC-18.C4.8-B4.5A.7
Jackson, David	CA	IAC-18.B4.2.9
Jackson, Kathryn	CA	IAC-18.B4.2.7
Jackson, Pearl Mary	CA	IAC-18.C2.7.1
Jacobs, Thomas	CA	IAC-18.B2.IP.21
Jacobsen, Sven	CA	IAC-18.B1.5.3
Jacobsen, Sven	CA	IAC-18.B1.5.4
Jacobsen, Sven	A	IAC-18.B1.IP.7
Jacobson, David	CA	IAC-18.C4.4.1
Jacquinot, Kevin	CA	IAC-18.A3.2A.7
Jacquinot, Kevin	CA	IAC-18.B4.8.5
Jah, Moriba	CA	IAC-18.A6.9.4
Jah, Moriba	CA	IAC-18.A6.IP.9
Jah, Moriba	CA	IAC-18.A6.10-C1.7.2
Jahnke, Rico	CA	IAC-18.A3.4B.6
Jahnke, Stephan Siegfried	CA	IAC-18.B3.9-GTS.2.2
Jahnke, Stephan Siegfried	A	IAC-18.D1.4A.3
Jahnke, Stephan Siegfried	CA	IAC-18.D1.IP.13
Jaime, Andrea	CA	IAC-18.A3.2A.9
Jaime, Andrea	CA	IAC-18.B1.2.8
Jaime, Andrea	CA	IAC-18.D2.4.7
Jaime, Andrea	CA	IAC-18.B1.IP.9
Jaime, Andrea	CA	IAC-18.B3.7.4
Jain, Gaargi	CA	IAC-18.A5.1.5
Jain, Gaargi	CA	IAC-18.E3.IP.13
Jain, Kunal	A	IAC-18.A6.IP.26
Jain, Minal	CA	IAC-18.A2.4.3
Jain, Mridul	CA	IAC-18.D4.IP.1
Jain, Mridul	A	IAC-18.C4.6.11
Jain, Rutwik	A	IAC-18.D1.2.8
Jakab, Dorottya	CA	IAC-18.A1.5.11
Jakhu, Ram S.	A	IAC-18.E7.4.2
Jakob, Deller	CA	IAC-18.B4.8.9
JALBERT, Nicolas	CA	IAC-18.C4.7-C3.5.2
James, Adrian	A	IAC-18.E1.7.14
Jamieson, Jonathan	CA	IAC-18.A5.1.6
Jan, Monica	CA	IAC-18.D2.7.4
Janardhanan Nair, Jayaprakash	CA	IAC-18.C4.IP.5
Jangid, Sandeep	CA	IAC-18.A4.IP.6
Jangid, Sandeep	CA	IAC-18.D4.IP.9
Jangid, Sandeep	CA	IAC-18.C3.4.9
Janiak, Kamil	CA	IAC-18.A1.7.13
Jankovic, Marko	CA	IAC-18.D3.2.12
Jankovic, Marko	CA	IAC-18.D3.IP.2
Jankovic, Marko	CA	IAC-18.D1.6.5
Janoth, Jürgen	CA	IAC-18.B1.IP.35
Janzer, Katja	A	IAC-18.C2.7.11
Jaret, Steven	CA	IAC-18.A3.2C.8
Jarosz, Wojciech	CA	IAC-18.A1.1.13
Jarosz, Wojciech	CA	IAC-18.A1.7.12
Jarzynka, Stanisław	CA	IAC-18.C2.IP.6
Jaschinski, Neil	CA	IAC-18.B3.IP.3
Jaschinski, Neil	CA	IAC-18.A2.6.14
Jason, Susan	CA	IAC-18.A3.2A.10
Jason, Susan	CA	IAC-18.B4.5.13
Jaturut, Seksan	CA	IAC-18.B6.1.2
Jaumann, Manfred	CA	IAC-18.A3.2B.8
Jaumann, Ralf	CA	IAC-18.A3.4A.2
Jauß, Thomas	CA	IAC-18.A2.2.17
Jaworski, Jaroslaw	CA	IAC-18.D1.6.10
JAYAKUMAR, E	CA	IAC-18.C4.IP.24
Jayamani, Krishnajith	CA	IAC-18.C4.IP.24
Jayaprakash, J	CA	IAC-18.C4.IP.10
JC, Pisharady	CA	IAC-18.C4.5.9
JC, Pisharady	CA	IAC-18.C4.10.2
JC, Pisharady	CA	IAC-18.C4.10.6
Jean, Isabelle	A	IAC-18.C1.2.2
Jean-St-Laurent, Mathilde	A	IAC-18.C2.6.4
JEANTY-RUARD, Benjamin	CA	IAC-18.D1.IP.8
Jegou, Roger	CA	IAC-18.D1.5.3
Jenkin, Alan B.	A	IAC-18.A6.4.3
Jenkin, Alan B.	CA	IAC-18.A6.7.6
Jenkin, Michael	CA	IAC-18.A1.8.4
Jensen, Morten	CA	IAC-18.B2.7.5
Jeschke, Sabina	CA	IAC-18.A3.5.8
Jetzschmann, Michael	CA	IAC-18.B4.6A.6
Jeurissen, Ben	CA	IAC-18.A1.2.14
Jevremovic, Tatjana	CA	IAC-18.A1.5.4
Jewell, Emmy Helen	A	IAC-18.E6.IP.4
Jewell, Nicholas	CA	IAC-18.A1.4.3
Jewell, Susan	A	IAC-18.E5.IP.10
Jeyakodi, Deepika	CA	IAC-18.E7.1.2
Ji, Xiaoxiong	A	IAC-18.C3.IP.9
Ji, Zhanxin	CA	IAC-18.A1.3.17
Ji, Zhipo	A	IAC-18.C3.3.10
Ji, Zhipo	CA	IAC-18.C3.IP.9
Jia, Feida	CA	IAC-18.A3.IP.11
Jia, Ning	A	IAC-18.E5.2.2
Jian, YANG	CA	IAC-18.B2.4.7
Jian, Zhang	A	IAC-18.B3.9-GTS.2.9
JIANG, Jialing	CA	IAC-18.B3.2.13
Jiang, Jun	A	IAC-18.D4.1.5
Jiang, Jun	CA	IAC-18.D4.1.14
Jiang, Lianxiang	A	IAC-18.D1.5.7
Jiang, Ling	A	IAC-18.B5.1.6

Jiang, Miaomiao	CA	IAC-18.B2.3.11
Jiang, Nan	CA	IAC-18.D2.8-A5.4.11
Jiang, Shengli	CA	IAC-18.E7.4.3
Jiang, Shuo	CA	IAC-18.C3.3.12
Jiang, Xiuqiang	A	IAC-18.A3.IP.42
Jianhua, Chen	CA	IAC-18.C4.10.3
Jianping, HU	CA	IAC-18.B2.4.7
Jianping, Yuan	CA	IAC-18.C1.4.6
Jianping, Yuan	CA	IAC-18.C1.IP.17
Jianping, Yuan	CA	IAC-18.D3.IP.3
Jiao, Dezhi	CA	IAC-18.A6.IP.17
Jiawan, Ren	A	IAC-18.C4.1.14
Jiawei, Shi	A	IAC-18.A6.3.6
Jilete, Beatriz	A	IAC-18.A6.IP.34
Jillings, Steven	CA	IAC-18.A1.2.14
Jimenez, Guillermo	A	IAC-18.D1.4B.2
Jimenez-Lluva, David	A	IAC-18.E2.2.3
Jiming, Shao	CA	IAC-18.D3.3.5
JIménez-Salazar, Vladimir	CA	IAC-18.B4.1.4
Jin, Ba	A	IAC-18.B1.2.1
JIN, Bingning	A	IAC-18.C4.IP.44
Jin, Na	CA	IAC-18.C2.IP.34
Jin, Xiaokun	CA	IAC-18.D2.5.11
Jin, Xuan	A	IAC-18.C4.9.10
Jin, Yan	A	IAC-18.A1.2.21
Jin, Yulin	CA	IAC-18.D1.IP.18
Jin, Yulin	CA	IAC-18.D5.IP.1
Jindal, Deepika	CA	IAC-18.D1.IP.10
Jing, Tao	CA	IAC-18.A1.5.8
Jing, Tingting	A	IAC-18.C4.9.4
Jing, Yaoxiang	CA	IAC-18.B2.1.9
Jinglang, Feng	A	IAC-18.C1.2.9
Jirik, Kathrin	A	IAC-18.A6.8.11
Jiuxing, Zhang	A	IAC-18.A7.IP.3
Jochemsen, Arnoud	CA	IAC-18.A3.2A.7
Jochemsen, Arnoud	CA	IAC-18.B4.4.7
Jochemsen, Arnoud	CA	IAC-18.B1.5.7
Jochemsen, Arnoud	CA	IAC-18.B4.8.5
Jochmann, Gregor	CA	IAC-18.D1.IP.6
Jochum, Markus	CA	IAC-18.B1.IP.35
Joe, Caram	CA	IAC-18.B3.1.8
Johann, Ulrich	CA	IAC-18.A2.1.7
Johannes, Bernd	CA	IAC-18.A1.IP.14
Johannes, Bernd	A	IAC-18.A1.IP.23
JOHN, OLUSOJI NESTER	A	IAC-18.E7.5.11
Johnson, Bradley	CA	IAC-18.B2.1.5
Johnson, Christopher	CA	IAC-18.D3.1.3
Johnson, Christopher	CA	IAC-18.E1.4.2
Johnson, Christopher	CA	IAC-18.A5.1.10
Johnson, Graham	A	IAC-18.B2.8-GTS.3.12
Johnson, Holly	CA	IAC-18.A3.3A.5
Johnson, Les	CA	IAC-18.A5.2.4
Johnson, Myles T.	CA	IAC-18.A3.3A.5
Johnson, Nathan	A	IAC-18.E7.1.7
Johnson, Phyllis	CA	IAC-18.A1.1.2
Johnson, Phyllis	CA	IAC-18.A1.1.3
Johnston, Martin	A	IAC-18.A3.3A.4
Johnstone, Alicia	A	IAC-18.B4.5.14
Joldes, Mioara	CA	IAC-18.C1.IP.32
Jomaas, Grunde	CA	IAC-18.A2.4.1
Jones, Howard	CA	IAC-18.A3.2B.6
Jones, Tyler	CA	IAC-18.B4.4.2
Jongmanns, Marcel	CA	IAC-18.A2.4.8
Jonsson, Lisa	CA	IAC-18.A7.2.6
Joop, Otfried	CA	IAC-18.A2.5.5
Joos, Cornelius	CA	IAC-18.D1.IP.17
Joosten, Kent	CA	IAC-18.A3.1.3
Jorba, Angel	CA	IAC-18.C1.2.3
Jorba-Cuscó, Marc	A	IAC-18.C1.2.3
Jordan, Jens	CA	IAC-18.A1.IP.3
Jorgensen, Jesper	A	IAC-18.E5.2.11
Josan, Poonampreet Kaur	CA	IAC-18.B3.5.6
Joseph, Christine	A	IAC-18.E6.3.5
Joshi, Asawari	CA	IAC-18.E2.4.10
Joshi, Dnyanada	CA	IAC-18.E2.4.10
Joshi, Riya	A	IAC-18.E1.IP.36
Joshi, Riya	A	IAC-18.E8.1.2
Joudoi, Daisuke	A	IAC-18.C3.1.7
Joudrier, Luc	CA	IAC-18.B6.3.5
Joudrier, Luc	CA	IAC-18.B6.3.6
Joumel, Pierre-Alexis	A	IAC-18.B1.IP.35
Jovanovic, Gregory	CA	IAC-18.E2.3-GTS.4.7
Jozefiak, Maria	CA	IAC-18.B1.5.7
Ju, Gwanghyeok	CA	IAC-18.A3.IP.58
Juang, Caroline	A	IAC-18.B1.6-GTS.1.3
Juang, Jer-Nan	CA	IAC-18.B4.3.9
Juang, Jer-Nan	CA	IAC-18.C1.3.3
Juang, Jyh-Ching	CA	IAC-18.E2.1.4
Juang, Jyh-Ching	CA	IAC-18.E2.4.5
Jukola, Paivi	A	IAC-18.D3.2.13
Jukola, Paivi	A	IAC-18.D3.4.9
Jung, Minsup	CA	IAC-18.A3.IP.53
Jung, Philippe	CA	IAC-18.E4.2.9
Jung, Sangwoo	A	IAC-18.C4.IP.52
Jung, YeonSoo	A	IAC-18.C4.5.2
Jungmann, Felix	A	IAC-18.A2.3.13
Jungmann, Felix	CA	IAC-18.A2.7.8
Jungnell, Victor	CA	IAC-18.B4.2.2
Jungnell, Victor	CA	IAC-18.C4.6.4
Junike, Nils	CA	IAC-18.B1.IP.3
Junk, Stefan	CA	IAC-18.C2.6.9
Jurado Lozano, Pedro José	CA	IAC-18.D1.4A.2
Jurga, Anna	CA	IAC-18.A2.IP.6
Jurga, Anna	A	IAC-18.A1.7.13
Jusoh, Mohamad Huzaimy	CA	IAC-18.B5.1.10
Jusoh, Mohamad Huzaimy	A	IAC-18.A7.2.2
Just, Gunter	CA	IAC-18.E2.3-GTS.4.9
Jutzi, Martin	CA	IAC-18.B4.8.9
Jyoti, Rajeev	CA	IAC-18.B1.3.9
Jäcklein, Martin	CA	IAC-18.C2.5.11
Jäger, Markus	A	IAC-18.D2.3.1
Jäger, Markus	CA	IAC-18.C4.IP.35
Jörres, Marc	CA	IAC-18.A1.4.12
Jørgensen, John Leif	CA	IAC-18.C1.5.10
Jürgens, Carsten	CA	IAC-18.B1.2.11
Jürgens, Carsten	CA	IAC-18.E1.2.1

K

Name	Role	Paper
K, Raju	A	IAC-18.D2.2.10
K, SACHIN	CA	IAC-18.E2.4.12
K, Vinod	CA	IAC-18.E2.4.12
K. Pfeiffer, Ernst	CA	IAC-18.C2.2.4
K. Pfeiffer, Ernst	CA	IAC-18.A6.5.3
K. Pfeiffer, Ernst	CA	IAC-18.B2.7.10
Kabir, Wassif	CA	IAC-18.E1.4.7
Kabitskaya, Olga	CA	IAC-18.A1.IP.18
Kaczmara, Daniel	CA	IAC-18.B5.1.9
Kaczmarczik, Ulrich	CA	IAC-18.A2.5.1
Kaczmarzyk, Marcin	CA	IAC-18.A1.7.12
Kaemer, Anna	CA	IAC-18.A2.IP.8
Kaethler, Stan	A	IAC-18.D3.2.6
Kaethler, Stan	A	IAC-18.D4.5.6
Kafi, Abdulla Hil	CA	IAC-18.E1.5.13
Kafi, Abdulla Hil	CA	IAC-18.B1.IP.26
Kahle, Ralph	CA	IAC-18.A6.10-C1.7.7
Kahle, Ralph	CA	IAC-18.B6.1.1
Kahlon, Azeem	CA	IAC-18.C3.4.9
Kahraman, Duygu	CA	IAC-18.E1.4.9
Kahrs, Jan	CA	IAC-18.A1.6.2
Kahrs, Jan	CA	IAC-18.A1.IP.17
Kaiser, Stefan A.	A	IAC-18.E7.5.2
Kajiyama, Takahiro	CA	IAC-18.D1.5.6
Kakimoto, Yuta	CA	IAC-18.B4.7.10
Kalafatidou, Maria	CA	IAC-18.A3.IP.7
Kalinin, Sergey	CA	IAC-18.A1.4.14
Kalinkin, Sergey	CA	IAC-18.E1.IP.20
Kalkuhl, Christoph	CA	IAC-18.A7.3.7
Kalkus, Trevor	A	IAC-18.A2.7.12
Kalmančok, Dušan	CA	IAC-18.A6.IP.6
Kaltenhaeuser, Sven	CA	IAC-18.B2.5.4
Kaltenhaeuser, Sven	A	IAC-18.D6.3.3
Kaltenhaeuser, Sven	CA	IAC-18.D6.3.9
Kaluba, Tadeusz	CA	IAC-18.B5.1.9
Kaluthantrige, Aurelio	CA	IAC-18.A3.4A.7
Kalwar, David	CA	IAC-18.C4.IP.35
Kamachi, Koh	CA	IAC-18.C2.7.5
Kamaletdinova, Guzel	A	IAC-18.B3.9-GTS.2.5
Kamath, Ulhas	A	IAC-18.B3.4-B6.4.12
Kamogawa, Masashi	A	IAC-18.D4.3.5
Kamoun-Rosenko, Hend	CA	IAC-18.C4.5.8
Kampen, Sytze	CA	IAC-18.B1.3.1
KANAI, Ryuichiro	A	IAC-18.D2.7.9
Kanawka, Krzysztof	A	IAC-18.E1.5.3
Kanawka, Krzysztof	A	IAC-18.E6.2.11
Kanbara, Naoki	CA	IAC-18.D1.5.6
Kane, Megan	A	IAC-18.E6.1.10
Kane, Megan	A	IAC-18.A5.IP.3
Kane, Megan	A	IAC-18.E3.6.8
Kanefsky, Bob	CA	IAC-18.B3.4-B6.4.6
Kaneko, Akiko	CA	IAC-18.A2.4.9
Kanev, Stepan	CA	IAC-18.C4.IP.34
Kang, Guohua	A	IAC-18.B4.6A.10
Kang, Jin Ho	A	IAC-18.C2.6.2
Kang, Kyungin	A	IAC-18.A3.IP.53
Kang, Qi	A	IAC-18.A2.3.11
KANG, Shipeng	A	IAC-18.C2.IP.32
Kaniewski, Damian	CA	IAC-18.D2.9-D6.2.11
Kant, Przemyslaw	A	IAC-18.B2.IP.5
Kant, Przemyslaw	CA	IAC-18.D2.IP.9
Kantsiper, Brian	CA	IAC-18.C1.9.7
Kapitola, Sascha	CA	IAC-18.B4.3.1
Kapitola, Sascha	CA	IAC-18.E1.4.4
Kapoglou, Angeliki	A	IAC-18.E3.IP.15
Kapoun, Petr	CA	IAC-18.A1.6.2
Kappelmann, Norbert	CA	IAC-18.A7.3.7
Kaptein, Alexander	CA	IAC-18.B1.IP.35
Kara, Ozan	CA	IAC-18.C4.3.10
Kara, İbrahim Emir	CA	IAC-18.E1.1.14
Karabadzhak, George	CA	IAC-18.B3.3.3
Karabadzhak, Georgy	CA	IAC-18.A3.1.7
Karabeyoglu, Arif	A	IAC-18.C4.2.6
Karabeyoglu, Arif	CA	IAC-18.C4.3.10
Karacan, Ufuk	CA	IAC-18.E1.1.14
KaramiNejadRanjbar, Mohammad	CA	IAC-18.A2.7.10
Kargl, Florian	CA	IAC-18.A2.4.11
Karim, Abdul	CA	IAC-18.C2.IP.24
Karimaghaloo, Alireza	CA	IAC-18.C2.IP.3
Karl, Christoph	CA	IAC-18.B4.5.12
Karlsson, Niklas	CA	IAC-18.D1.1.1
KARMAKAR, SOURAV	A	IAC-18.D4.1.15
Karnal, Manohar	CA	IAC-18.A6.4.9
Karolewski, Łukasz	CA	IAC-18.D2.IP.9
Karolewski, Łukasz	CA	IAC-18.D2.9-D6.2.10
Karp, Ashley	A	IAC-18.C4.2.5
Karp, Ashley	A	IAC-18.A3.3A.7
Karrasch, Christian	CA	IAC-18.A1.3.3
Karrasch, Christian	CA	IAC-18.B3.7.8
Karthikeyan, Goutham	A	IAC-18.C4.2.11
Karthikeyan, Goutham	CA	IAC-18.E7.7-B3.8.5
Kashioka, Shuya	A	IAC-18.C2.5.6
Kaspersen, Kristin	CA	IAC-18.B3.7.4
Kassam, Iqbal	CA	IAC-18.B3.4-B6.4.11
Kassemi, Mohammad	A	IAC-18.A2.2.6
Kasztankiewicz, Anna Barbara	CA	IAC-18.A6.5.9
Katano, Shotaro	CA	IAC-18.A6.3.2
Kataria, Dhiren	CA	IAC-18.B4.2.2
Kataria, Dhiren	CA	IAC-18.C4.6.4
Kato, Hiroki	CA	IAC-18.D1.1.4
Kato, Takahiro	CA	IAC-18.C1.IP.11
Kato, Takahiro	A	IAC-18.D1.IP.32
Kaufmann, Dorit	CA	IAC-18.D1.IP.6
Kaufmann, Marcel	A	IAC-18.B4.3.11
Kaufmann, Marcel	CA	IAC-18.B3.6-A5.3.9
Kaufmann, Nils	CA	IAC-18.A1.4.5
Kaupisch, Thilo	CA	IAC-18.B3.6-A5.3.3
Kaushik, Tushar	CA	IAC-18.B4.9-GTS.5.10
Kawaguchi, Junichiro	CA	IAC-18.D1.2.4
Kawaguchi, Junichiro	CA	IAC-18.C1.3.2
Kawaguchi, Junichiro	CA	IAC-18.C1.6.8
Kawakatsu, Yasuhiro	CA	IAC-18.C1.2.6
Kawakatsu, Yasuhiro	A	IAC-18.A3.3A.8
Kawakatsu, Yasuhiro	CA	IAC-18.C1.9.4
Kawakatsu, Yasuhiro	CA	IAC-18.C1.9.10
Kawamoto, Satomi	CA	IAC-18.C4.IP.31
Kawamoto, Satomi	A	IAC-18.A6.6.5
Kawasaki, Shigeo	CA	IAC-18.C3.2.8
Kawasaki, Shigeo	CA	IAC-18.C2.5.2
Kawashima, Rei	A	IAC-18.B4.1.11
Kawashima, Rei	CA	IAC-18.B4.9-GTS.5.1
Kaya, Nobuyuki	CA	IAC-18.B2.IP.9
Kaya, Nobuyuki	A	IAC-18.B2.6.7
Kayaba, Ayako	A	IAC-18.C2.5.2
Kayal, Hakan	CA	IAC-18.B4.3.13
KAYIHAN, Hasan Aziz	A	IAC-18.E1.IP.24
KAYIHAN, Hasan Aziz	CA	IAC-18.E1.1.14
Kazakovtsev, Victor	CA	IAC-18.C2.3.3
Kazemi, Hamid	A	IAC-18.E7.7-B3.8.4
KC, Chandramouli	A	IAC-18.C2.IP.38
Ke, Fa-wei	CA	IAC-18.A6.IP.17
Ke, Fa-wei	A	IAC-18.A6.IP.20
Ke, Fa-wei	A	IAC-18.A6.IP.20
Ke, Wenlong	CA	IAC-18.B3.IP.8
Kearby, Harrison	A	IAC-18.E7.7-B3.8.2
Kee, Calvin	CA	IAC-18.A3.4B.8
Keen, Sophie	CA	IAC-18.E1.4.7
Kehrer, Johannes	CA	IAC-18.A2.1.4
Keidar, Michael	CA	IAC-18.C4.8-B4.5A.5
Keilig, Thomas	CA	IAC-18.A7.3.7
Keim, Jonas	A	IAC-18.B4.3.2
Kekez, Daniel	CA	IAC-18.B4.4.8
Kelecy, Thomas	CA	IAC-18.A6.10-C1.7.2
Kelecy, Thomas	A	IAC-18.A6.10-C1.7.4
Kelly, Shane	CA	IAC-18.B2.1.5
Kelso, T.S.	A	IAC-18.A6.7.8
Kemp, Jack	CA	IAC-18.A5.1.5
Kempf, Florian	A	IAC-18.C1.6.1
Kempton, Kevin	A	IAC-18.A1.IP.11
Kempton, Kevin	A	IAC-18.D4.4.12
Kendall, Randolph	CA	IAC-18.D2.1.6
Kent, John T	CA	IAC-18.A6.9.4
Kent, John T	CA	IAC-18.A6.IP.9
Keogh, Laura	A	IAC-18.E7.3.4
Keppler, Jochen	CA	IAC-18.E1.3.8
Keppler, Jochen	A	IAC-18.A1.7.4
Keppler, Jochen	CA	IAC-18.A1.7.6
Kerjean, Laurent	CA	IAC-18.A3.3B.5
Kerolle, Mclee	CA	IAC-18.A5.1.9
Kerolle, Mclee	CA	IAC-18.E7.IP.22
Kerr, Emma	A	IAC-18.A6.9.1
Kerr, Emma	CA	IAC-18.A6.6.4
Kerr, Murray	CA	IAC-18.C1.5.5
Kerr, Murray	CA	IAC-18.C1.5.10
Kersey, George	CA	IAC-18.E2.3-GTS.4.5
Kerstens, Nathalie	A	IAC-18.D5.2.8
Kessler, Claudia	CA	IAC-18.B3.2.10
Kessler, Claudia	CA	IAC-18.B3.IP.13
Kessler, Marcel	CA	IAC-18.C1.8.2
Keuck, Vanessa	A	IAC-18.B1.4.2
Kezerashvili, Roman Ya.	CA	IAC-18.A7.2.5
Khalil, Mohamed	CA	IAC-18.E2.3-GTS.4.7
Khalil Ibrahim, Mohammed	CA	IAC-18.B4.1.11
Khalil Ibrahim, Mohammed	CA	IAC-18.B4.1.12
Khalimonov, Oleg	A	IAC-18.C2.9.7
Khan, Mohammad Yousaf	CA	IAC-18.B2.3.10
Khan, Muhammad Shadab	A	IAC-18.E2.4.6
Khan, Nishath	CA	IAC-18.E1.4.7
Khan, Shaker Bayajid	CA	IAC-18.A6.2.10
Kharat, Rohit	CA	IAC-18.B4.8.6

Kharin, Sergey	A	IAC-18.A2.IP.5
Kharin, Sergey	CA	IAC-18.A1.7.8
Kharlamov, Maksim	CA	IAC-18.B3.5.3
Kharlan, Alexander	A	IAC-18.B5.2.10
Kharlan, Iana	A	IAC-18.C4.8-B4.5A.10
Khartov, Sergey	CA	IAC-18.C4.IP.34
Khaustova, Nadezhda	CA	IAC-18.A1.8.13
Khomyak, Vadym	CA	IAC-18.A6.4.5
Khoshsima, Masoud	A	IAC-18.E5.4.5
Khromov, Oleg	CA	IAC-18.B4.6B.3
Khurana, Sayyam	CA	IAC-18.D2.5.12
Khutorovsky, Zakhary	CA	IAC-18.A6.1.1
Khutorovsky, Zakhary	CA	IAC-18.A6.7.5
KHWAMBALA, PATRICIA	A	IAC-18.E5.4.4
Kichakova, Olga	CA	IAC-18.A2.1.3
Kidd Jr, John	CA	IAC-18.A5.2.2
Kiesbye, Jonis	CA	IAC-18.B2.2.2
Kiewiet, Luca	CA	IAC-18.A5.1.5
Kiewiet, Luca	CA	IAC-18.E3.IP.13
Kiewiet, Luca	CA	IAC-18.D2.8-A5.4.6
Kikuchi, Masao	CA	IAC-18.A2.IP.9
Kikuchi, Masao	CA	IAC-18.A2.7.7
Kilias, Stephan	CA	IAC-18.A2.6.8
Killedar, Pankaj	CA	IAC-18.B2.2.9
Killian, Matthias	CA	IAC-18.C2.7.11
Kim, Daryl	CA	IAC-18.A6.1.5
Kim, Jin Kyu	CA	IAC-18.A3.IP.53
Kim, Jong-Bum	A	IAC-18.E5.2.6
KIM, KIDUCK	A	IAC-18.C1.6.7
Kim, Kyu-Seop	CA	IAC-18.C4.5.2
Kim, Kyunam	CA	IAC-18.D1.6.9
KIM, Kyunghwan	A	IAC-18.E5.IP.14
Kim, Matteo	CA	IAC-18.E2.3-GTS.4.7
Kim, Sangkyun	CA	IAC-18.D5.1.6
Kim, Sangkyun	CA	IAC-18.B4.7.10
Kim, Sungsoo S.	CA	IAC-18.A3.IP.53
Kim, Taegyu	CA	IAC-18.C2.IP.20
Kim, Taig Young	A	IAC-18.C2.7.10
Kim, Vladimir	CA	IAC-18.C4.4.11
Kim, Youngkyu	CA	IAC-18.A6.4.6
Kimani, John Njoroge	CA	IAC-18.B4.1.8
Kimber, Rick	CA	IAC-18.C3.4.5
Kimeisa, Linda	CA	IAC-18.E1.6.10
Kimura, Shinichi	A	IAC-18.E1.3.2
Kimura, Shinichi	A	IAC-18.D1.3.10
King, Melanie	A	IAC-18.E5.3.2
Kingston, Jennifer	CA	IAC-18.E2.3-GTS.4.5
Kinnaird, Alexander	CA	IAC-18.E1.IP.27
Kinoshita, Masahiro	CA	IAC-18.C4.2.2
Kirasich, Mark	A	IAC-18.B3.1.1
Kirchhartz, Rainer	A	IAC-18.D2.6.8
Kirchmaier, Achim	CA	IAC-18.A2.1.4
Kirchner, Frank	CA	IAC-18.D4.1.3
Kirichenko, Alexey	CA	IAC-18.E2.4.8
Kirievskii, Dmitrii	CA	IAC-18.E1.2.9
Kirk, Roy	CA	IAC-18.B4.5.9
Kirschbaum, Dalia	CA	IAC-18.B1.6-GTS.1.3
Kiss, Andras	A	IAC-18.B2.8-GTS.3.5
Kiss, John Z.	CA	IAC-18.A2.7.17
Kitade, Tomoya	CA	IAC-18.C1.9.10
Kitaeva, Alena	CA	IAC-18.C4.4.8
Kitagawa, Koki	A	IAC-18.C4.2.2
Kitamura, Hitoshi	CA	IAC-18.C2.3.6
Kitamura, Kenji	A	IAC-18.C1.1.13
Kitayama, Osamu	CA	IAC-18.D2.2.1
Kitmanyen, Victor	CA	IAC-18.B3.9-GTS.2.4
Kivastik, Joosep	A	IAC-18.B1.3.6
Kiyan, Wataru	CA	IAC-18.A1.2.17
Klatte, Jörg	A	IAC-18.C4.10.9
Klaus, David	CA	IAC-18.A1.7.9
Klaus, David	CA	IAC-18.A2.7.15
KLEIN, Alex	CA	IAC-18.A2.6.13
Klein, Rolf Dieter	CA	IAC-18.B2.2.2
Kleinschneider, Andreas	CA	IAC-18.C1.8.7
Kleinschrodt, Alexander	A	IAC-18.B4.3.12
Klemich, Kai	CA	IAC-18.B4.3.2
Klevanski, Josef	A	IAC-18.D2.6.3
Klimov, Konstantin	CA	IAC-18.C2.IP.16
Kline, Kristi	CA	IAC-18.B1.4.5
Klinkner, Sabine	CA	IAC-18.B4.3.2
Klinkner, Sabine	CA	IAC-18.B4.6A.12
Klinkner, Sabine	CA	IAC-18.A7.3.7
Klinkspoor, Hans	CA	IAC-18.C3.4.4
Klock, Timo	CA	IAC-18.C2.3.10
Klop, Casper	CA	IAC-18.C4.IP.33
Klopp, Christoph	CA	IAC-18.A2.2.12
Klopp, Christoph	A	IAC-18.A2.6.5
Kminek, Gerhard	CA	IAC-18.A3.5.11
KN, Dileep	CA	IAC-18.C4.10.12
Knapek, Christina A.	A	IAC-18.A2.6.3
Knapman, John	A	IAC-18.D4.3.4
Knapman, John	A	IAC-18.D4.IP.8
Knapp, Mary	CA	IAC-18.B4.3.4
Knickmann, Daniela	CA	IAC-18.A2.7.5
Knie, Miriam	A	IAC-18.A1.8.1
Knipfer, Cody	CA	IAC-18.E1.7.13
Knjazev, Eugene	CA	IAC-18.A1.8.13
Knoche, Ralf	A	IAC-18.D2.5.10
Knop, Tobias	CA	IAC-18.D2.6.6
Knopp, Andreas	CA	IAC-18.B2.1.1
Knopp, Marcus	CA	IAC-18.B2.1.1
Knopp, Marcus	A	IAC-18.B6.2.10
Knorr, Wolfram	CA	IAC-18.D5.2.6
Knorr, Wolfram	A	IAC-18.D1.4A.11
Knorr, Wolfram	CA	IAC-18.D1.5.3
Kobald, Mario	CA	IAC-18.D2.7.5
Kobata, Kazushi	A	IAC-18.E7.4.11
Kobayakawa, Toyonori	A	IAC-18.C1.IP.9
Kobayashi, Kenji	A	IAC-18.A2.4.9
Kobayashi, Michael	A	IAC-18.B2.1.5
Kobayashi, Teiu	CA	IAC-18.C4.IP.8
Kobow, Leonard	CA	IAC-18.C1.4.2
Kobrick, Ryan L.	CA	IAC-18.E5.1.11
Kobrick, Ryan L.	A	IAC-18.D5.3.6
Koch, Aaron	CA	IAC-18.D1.4B.8
Koch, Aaron	CA	IAC-18.A3.4B.6
Koch, Astrid-Christina	A	IAC-18.B1.1.1
Koch, Patrick	CA	IAC-18.C4.2.8
Koch, Per	A	IAC-18.B2.7.5
Kocis, Danko	CA	IAC-18.E5.5.4
Kocour, Vladimir	A	IAC-18.A5.IP.5
Kodeki, Kazuhide	CA	IAC-18.C2.3.6
Koechel, Stephanie	A	IAC-18.E6.3.2
Koechlin, Charlie	CA	IAC-18.B2.7.2
Koehler, Carmen	CA	IAC-18.B3.2.10
Koehler, Carmen	CA	IAC-18.B3.IP.13
Koehler, Stijn	CA	IAC-18.C4.IP.33
Koeleman, Rick	CA	IAC-18.B4.4.7
Koester, Marc	CA	IAC-18.A2.IP.8
Kohfeldt, Anja	A	IAC-18.C3.3.11
Kohfeldt, Anja	A	IAC-18.C2.6.9
Kohlberg, Eberhard	CA	IAC-18.A1.IP.4
Kohli, Kamna	CA	IAC-18.E6.1.9
Kohmura, Takayoshi	CA	IAC-18.E1.3.2
Kojima, Hirohisa	CA	IAC-18.C2.3.5
Kojima, Hirohisa	CA	IAC-18.D1.6.2
Koka, Hashmita	CA	IAC-18.D3.1.3
Kolb, Florian M.	CA	IAC-18.B3.IP.9
Kolbeck, Jonathan	CA	IAC-18.E1.7.13
Kolbeck, Jonathan	CA	IAC-18.B4.9-GTS.5.3
Kolbeck, Jonathan	A	IAC-18.C4.8-B4.5A.5
Kolesov, Dmitry	CA	IAC-18.A1.8.18
Koliada, Olena	A	IAC-18.C2.7.6
Kollias, Vangelis	CA	IAC-18.D3.2.12
Kolloge, Hans-Georg	CA	IAC-18.B3.2.10
Kolmykova, Tatiana	CA	IAC-18.E1.7.5
Kolodziejczyk, Agata	CA	IAC-18.A3.3B.3
Kolodziejczyk, Agata	A	IAC-18.E1.7.9
Kolodziejczyk, Agata	A	IAC-18.A1.IP.10
Kolodziejczyk, Agata	CA	IAC-18.B3.IP.5
Kolodziejczyk, Agata	CA	IAC-18.B3.6-A5.3.10
Kolodziejczyk, Agata	A	IAC-18.A1.7.15
Kolomentsev, Alexander I.	CA	IAC-18.C4.7-C3.5.8
Kolozeznyy, Anton	CA	IAC-18.A6.3.10
Kolvenbach, Hendrik	CA	IAC-18.D3.3.10
Komarov, Ilya	CA	IAC-18.A6.3.10
Komarov, Ilya	CA	IAC-18.C2.6.1
Komorowski, Matthieu	CA	IAC-18.A1.4.3
Komrowski, Christoph	CA	IAC-18.D5.3.2
Komurasaki, Kimiya	CA	IAC-18.C2.4.5
Konaka, Mina	CA	IAC-18.B3.9-GTS.2.3
Konaka, Mina	A	IAC-18.C2.7.5
Koncz, Alexander	CA	IAC-18.A3.4B.6
Konda, Bikash	CA	IAC-18.A1.5.7
KONERU VIJAYARAGHAVA, RAGHURAM	CA	IAC-18.C3.2.5
Kong, Fan	CA	IAC-18.C4.9.6
Konopka, Martin	CA	IAC-18.C4.5.15
Konopka, Martin	CA	IAC-18.C4.10.5
Konopka, Uwe	CA	IAC-18.A2.6.3
Konorski, Piotr	CA	IAC-18.B6.3.4
Konstanski, Harald	CA	IAC-18.D1.5.1
Konstantinidis, Konstantinos	CA	IAC-18.A6.6.4
Kontoes, Haris	CA	IAC-18.B1.IP.10
Koop, Artur	A	IAC-18.C4.5.8
Koopmans, Robert-Jan	A	IAC-18.C4.5.3
Kopacz, Nina	CA	IAC-18.A3.2C.8
Kopp, Sascha	CA	IAC-18.A1.IP.26
Kopp, Sascha	CA	IAC-18.A1.8.7
Kopp, Sascha	CA	IAC-18.A1.8.8
Kopp, Sascha	A	IAC-18.A1.8.9
Kopp, Sascha	CA	IAC-18.A2.7.11
Koretskii, Maxim	CA	IAC-18.E2.4.8
Korn, Christian	CA	IAC-18.E2.3-GTS.4.1
Korn, Nikolas	CA	IAC-18.B4.6B.14
Korneeva, Ekaterina	CA	IAC-18.A1.8.18
Kornienko, Andrei	CA	IAC-18.A1.3.20
Kornienko, Andrei	CA	IAC-18.A2.IP.5
Kornienko, Andrei	CA	IAC-18.A1.7.8
Kornoš, Leonard	CA	IAC-18.A6.IP.6
Korolev, Pavel	CA	IAC-18.D4.5.3
Korondi, Peter Zeno	CA	IAC-18.D1.4B.11
Korsitzky, Hartmut	CA	IAC-18.A1.6.12
Korth, David	CA	IAC-18.B3.4-B6.4.6
Kortmann, Martin	A	IAC-18.D1.2.12
Koru, Aziz	CA	IAC-18.E1.4.9
Korus, Nicole	CA	IAC-18.C4.1.10
Koryanov, Vsevolod	A	IAC-18.D1.1.8
Koryanov, Vsevolod	A	IAC-18.C2.3.3
Koryanov, Vsevolod	A	IAC-18.A6.10-C1.7.10
Korzenowski, Heidi	CA	IAC-18.C2.1.4
Koschate, Jessica	CA	IAC-18.A1.2.7
Koschate, Jessica	A	IAC-18.A1.2.8
Koschek, Katharina	CA	IAC-18.C2.IP.12
Koschny, Detlef	CA	IAC-18.A3.2A.7
Kose, Suleyman	CA	IAC-18.E1.4.9
Kosenko, Ivan	CA	IAC-18.A3.IP.50
Kosenko, Ivan	CA	IAC-18.D4.IP.3
Kostin, Andrey	CA	IAC-18.C4.4.4
Kotecha, Krishna	CA	IAC-18.E1.4.7
Kothakonda, Akshay	A	IAC-18.D5.1.9
Kotichintala, Swetha	A	IAC-18.B1.IP.25
Kotrovskaya, Tatiana	CA	IAC-18.A1.IP.14
Kotsur, Oleg	CA	IAC-18.E2.4.8
Kottmeier, Sebastian	A	IAC-18.D1.4B.7
Kou, Raphaël	CA	IAC-18.E2.3-GTS.4.2
Koudelka, Otto	A	IAC-18.B4.3.9-GTS.5
Koudelka, Otto	CA	IAC-18.B2.5.7
Koudelka, Otto	CA	IAC-18.B4.6B.4
Koudelka, Otto	CA	IAC-18.B2.7.8
Kouprianov, Vladimir	CA	IAC-18.A6.IP.1
Kourtidou-Papadeli, Chrysoula	CA	IAC-18.A1.3.11
Kourtidou-Papadeli, Chrysoula	CA	IAC-18.A1.3.12
Kourtidou-Papadeli, Chrysoula	CA	IAC-18.A1.3.13
Kourtidou-Papadeli, Chrysoula	CA	IAC-18.A1.3.14
Kousaka, Daiki	CA	IAC-18.C2.2.2
Kovalchuk, Evgeny	CA	IAC-18.A2.1.7
Kozawska, Aleksandra	CA	IAC-18.E2.3-GTS.4.9
Kozlovskaya, Inesa	CA	IAC-18.A1.2.6
Kozlovskaya, Inesa	CA	IAC-18.A1.2.29
Kozyrovska, Natalia	CA	IAC-18.A1.6.12
Krabbe, Alfred	CA	IAC-18.A7.3.7
Krag, Holger	CA	IAC-18.A6.2.6
Krag, Holger	CA	IAC-18.A6.2.10
Krag, Holger	CA	IAC-18.A6.4.2
Krag, Holger	A	IAC-18.A6.7.1
Krag, Holger	CA	IAC-18.A6.7.2
Krainova, Irina	CA	IAC-18.C2.7.4
Krainovic, Anselm	CA	IAC-18.B4.3.13
Krajčovič, Stanislav	CA	IAC-18.A6.IP.6
Kramer, Alexander	CA	IAC-18.C4.8-B4.5A.4
Krassnigg, Anna	CA	IAC-18.A2.6.8
Krasteva, Mariya	CA	IAC-18.B4.4.6
Krause, Christian	CA	IAC-18.A3.4A.2
Krause, Christian	CA	IAC-18.A3.4B.6
Krausse, Jutta	CA	IAC-18.A1.3.18
Kravets, Victoria	CA	IAC-18.D4.1.1
Kreisel, Jens	CA	IAC-18.E1.5.8
Kreisel, Joerg	A	IAC-18.E6.1.4
Kreisel, Joerg	CA	IAC-18.E7.7-B3.8.13
Krejci, David	CA	IAC-18.C2.7.11
Krempel, Lucas	CA	IAC-18.B2.2.2
Krenn, Rainer	CA	IAC-18.A3.2A.8
Krenn, Rainer	CA	IAC-18.D1.4B.1
Krieger, Gerhard	CA	IAC-18.B1.2.4
Krijgsheld, Pauline	CA	IAC-18.E5.1.7
Krimigis, Stamatios	CA	IAC-18.D4.4.2
Kringe, Pascal	CA	IAC-18.D3.1.3
Krishnamurthy, Akshata	A	IAC-18.A7.3.6
Krishnamurthy, Asuthosh	CA	IAC-18.C1.IP.16
Kristensen, Anders	CA	IAC-18.A6.6.4
Krizmanic, John	CA	IAC-18.A7.3.9
Krokstedt, Christian	CA	IAC-18.D2.2.5
Krokstedt, Christian	CA	IAC-18.A7.3.7
Krolikowski, Alanna	CA	IAC-18.E3.2.7
Kroon, Martin	A	IAC-18.A3.IP.38
Kroon, Martin	CA	IAC-18.C3.4.4
Kros, Alexander	CA	IAC-18.A1.6.8
Krpelik, Daniel	CA	IAC-18.D1.4B.11
Krueger, Thomas	CA	IAC-18.A2.5.10
Krueger, Thomas	CA	IAC-18.B3.6-A5.3.5
Krueger, Thomas	CA	IAC-18.B3.6-A5.3.7
Kruglanski, Michel	A	IAC-18.B3.4-B6.4.10
Krupp, Norbert	CA	IAC-18.A7.3.3
Kruß, Maximilian	CA	IAC-18.A2.7.8
Krutzik, Markus	CA	IAC-18.A2.1.8
Krutzik, Markus	CA	IAC-18.A2.1.9
Kryuchkov, Boris	CA	IAC-18.B3.5.3
Kryza, Lennart	CA	IAC-18.E1.4.4
Krüger, Hans	CA	IAC-18.C1.5.9
Krüger, Marcus	CA	IAC-18.A1.IP.26
Krüger, Marcus	CA	IAC-18.A1.8.7
Krüger, Marcus	A	IAC-18.A1.8.8
Krüger, Marcus	CA	IAC-18.A1.8.9
Krüger, Marcus	CA	IAC-18.A2.7.11
Ksenik, Eugen	CA	IAC-18.C2.1.7
Ku, Wonhoe	A	IAC-18.E2.2.4
Kubicka, Manuel	A	IAC-18.B2.IP.18
Kubicka, Manuel	CA	IAC-18.B4.6B.4
Kubicka, Manuel	CA	IAC-18.B2.7.8
Kubo, Yuki	CA	IAC-18.D1.2.4
Kubo, Yuki	A	IAC-18.C1.3.2
Kubota, Takashi	CA	IAC-18.C1.IP.34
Kuciński, Tomasz	CA	IAC-18.C2.IP.6
Kuciński, Tomasz	CA	IAC-18.A3.5.3
Kuda, Sergii	A	IAC-18.A6.4.5
Kuebler, Ulrich	CA	IAC-18.A1.3.3
Kuehn, Daniel	CA	IAC-18.D4.1.3
Kuehn, Simone	CA	IAC-18.A1.1.7
Kuehn, Simone	CA	IAC-18.A1.2.13
Kuehn, Simone	CA	IAC-18.A1.4.6

Kuehn, Simone	CA	IAC-18.A1.4.19
Kueppers, Michael	CA	IAC-18.A3.4A.6
Kueppers, Michael	CA	IAC-18.A3.4B.4
Kugler, Stefan	CA	IAC-18.D1.1.9
Kuhn, Markus	CA	IAC-18.D2.7.6
Kuhnhenn, Jochen	A	IAC-18.C2.6.3
Kuhnhenn, Jochen	CA	IAC-18.D5.3.2
KuK, Joong Won	CA	IAC-18.C4.IP.41
Kuklewski, Michał	CA	IAC-18.B5.1.9
Kukoba, Tatyana	A	IAC-18.A1.IP.13
Kulkarni, Amogh	CA	IAC-18.A3.3B.12
Kulkarni, Shrinivasrao R.	CA	IAC-18.C2.1.5
Kumar, Kartik	A	IAC-18.E6.1.9
Kumar, Kartik	CA	IAC-18.D1.IP.31
Kumar, Manish	CA	IAC-18.B1.3.9
Kumar, Sumit	A	IAC-18.B2.2.4
Kumar, Vijaya	CA	IAC-18.B5.2.5
Kumar Rao, Karun	A	IAC-18.C3.IP.6
Kumar S., Sunil	CA	IAC-18.C4.5.9
Kumar S., Sunil	CA	IAC-18.C4.10.2
Kunitskaya, Alina	CA	IAC-18.D1.1.6
Kuperman, Igor	CA	IAC-18.B2.1.5
Kupetz, Andre	CA	IAC-18.D1.IP.6
Kurahara, Naomi	A	IAC-18.E6.1.1
Kuratomi, Takeshi	CA	IAC-18.C3.1.7
Kuremyr, Tobias	CA	IAC-18.D1.1.1
Kurian, Thomas	CA	IAC-18.C2.IP.33
Kurilov, Maxim	CA	IAC-18.D6.1.9
Kurita, Jorge	A	IAC-18.E1.IP.25
Kuritsin, Andrey	A	IAC-18.B3.5.3
KURIYAMA, Ikuko	A	IAC-18.B1.1.3
Kuroki, Hiroshi	CA	IAC-18.A1.2.17
Kurosu, Akihide	A	IAC-18.C4.1.5
KURRA, SASI SAKETH	A	IAC-18.A3.2C.10
Kurrle, James	A	IAC-18.E1.4.7
Kuschnig, Rainer	CA	IAC-18.B4.3.6
Kussmaul, Anna	A	IAC-18.B3.2.5
Kutko, Olga	CA	IAC-18.A1.4.14
Kutter, Bernard	A	IAC-18.D2.1.5
Kuusk, Joel	CA	IAC-18.B1.3.6
Kuwahara, Toshinori	CA	IAC-18.C2.7.5
Kuzin, Sergey	CA	IAC-18.E2.4.8
Kuzmina, Lyudmila	A	IAC-18.C2.5.12
Kuznetsov, Eduard	A	IAC-18.A6.IP.5
Kuznetsova, Polina	A	IAC-18.A1.1.12
Kuźma, Joanna	A	IAC-18.A2.IP.6
Kuźma, Joanna	CA	IAC-18.A1.7.13
Kwade, Arno	CA	IAC-18.C3.3.7
Kwade, Arno	CA	IAC-18.A3.2C.5
Kwok, Kawai	CA	IAC-18.C2.2.12
Kwon, EunSook	CA	IAC-18.E1.7.12
Kwon, Sejin	CA	IAC-18.C4.5.2
Kwon, Sejin	CA	IAC-18.C4.IP.52
Kyriakopoulos, George	CA	IAC-18.D6.1.3
Kärräng, Patrik	A	IAC-18.A6.2.3
Köhler, Werner	CA	IAC-18.A2.4.4
Köhne, Torsten	CA	IAC-18.A1.IP.17
Költzsch, Danilo	CA	IAC-18.C2.6.9
Könemann, Thorben	CA	IAC-18.A2.5.1
Kössl, Christoph	CA	IAC-18.B3.7.8
Kössling, Matthias	CA	IAC-18.C4.7-C3.5.5
Küchemann, Oliver	CA	IAC-18.A3.4A.2
Kündgen, Tobias	CA	IAC-18.D5.3.2
Küppers, Michael	A	IAC-18.A3.4A.5
Küter, Nico	CA	IAC-18.A3.2C.5
Kędziora, Bartosz	CA	IAC-18.A3.5.3

L

Name	Role	Paper
L, Gnanappazham	CA	IAC-18.B5.2.5
L, Louis sam titus	CA	IAC-18.C4.5.4
L, RaviKumar	A	IAC-18.C1.IP.16
LA, GIWON	CA	IAC-18.C4.IP.50
La Mura, Pierfrancesco	A	IAC-18.A7.3.12
La Regina, Veronica	CA	IAC-18.B3.1.6
Labana, Zozimus	CA	IAC-18.A1.IP.20
Labanti, Claudio	CA	IAC-18.B4.2.11
Labate, Demetrio	CA	IAC-18.A3.2A.7
Labate, Demetrio	CA	IAC-18.B4.8.5
LaBelle, Remi	A	IAC-18.B2.6.5
Labizin, Andreas	CA	IAC-18.D4.5.3
Labourey, Quentin	CA	IAC-18.D1.2.7
Labutkina, Tatyana V.	A	IAC-18.A6.2.1
Labutkina, Tatyana V.	A	IAC-18.B2.3.6
Lachat, Daisy	CA	IAC-18.D3.3.2
Lachmann, Maike Diana	CA	IAC-18.A2.3.5
LaCroix, Andre	CA	IAC-18.D1.5.4
Lacroix, Simon	CA	IAC-18.D1.2.7
Lacroix, Simon	CA	IAC-18.B5.2.13
Lacroze, Etienne	CA	IAC-18.A1.IP.21
Lades, Martin	A	IAC-18.D4.3.17
Lades, Martin	A	IAC-18.D4.IP.10
Ladi, Michael	CA	IAC-18.B4.9-GTS.5.8
Ladjouze, Mohammed Cherif	CA	IAC-18.B4.3.5
Laduree, Gregory	CA	IAC-18.C2.3.10
Lafont, Ugo	CA	IAC-18.D3.IP.4
Lafont, Ugo	CA	IAC-18.C2.9.9
Lagarde, Thomas	A	IAC-18.B3.7.2
Lago, Daniel	CA	IAC-18.D4.2.6
Laharnar, Naima	A	IAC-18.A1.4.9
Lai, James	A	IAC-18.B3.IP.14
Lai, Peter	A	IAC-18.B4.8.4
Laipert, Frank	CA	IAC-18.C1.8.12
Laird, Ryan	CA	IAC-18.B3.IP.3
Laird, Ryan	CA	IAC-18.A2.6.14
Lakmal, Yasith	CA	IAC-18.B3.9-GTS.2.5
Lal, Bhavya	CA	IAC-18.E6.1.11
Lal, Bhavya	CA	IAC-18.B3.3.1
Lal, Bhavya	CA	IAC-18.E3.3.9
Lam, Try	CA	IAC-18.C1.8.12
Lama, Luca	CA	IAC-18.A6.1.9
Lama, Luca	CA	IAC-18.A6.IP.10
Lamamy, Julien-Alexandre	CA	IAC-18.A3.2B.4
Lamantea, M.	CA	IAC-18.B3.9-GTS.2.7
Lamb, Dan	CA	IAC-18.C3.4.5
Lambert, Andrew	CA	IAC-18.A6.1.2
Lambert, Andrew	CA	IAC-18.A6.10-C1.7.12
Lamboray, Bob	CA	IAC-18.E1.5.8
Lamborelle, Olivier	CA	IAC-18.B3.5.1
Lamborelle, Olivier	CA	IAC-18.E1.2.3
Lammens, Sarah	CA	IAC-18.D2.3.4
Lampariello, Roberto	CA	IAC-18.D1.IP.27
LAN, Shengchang	CA	IAC-18.B2.IP.7
Lancee, Jules	A	IAC-18.A5.2.7
Landeck, Wolf Alexander	A	IAC-18.A3.IP.47
Landgraf, Markus	A	IAC-18.A3.1.10
Landgraf, Markus	CA	IAC-18.A3.2B.7
Landgraf, Markus	CA	IAC-18.B3.6-A5.3.7
Landreani, Federica	CA	IAC-18.A1.2.22
Lange, Caroline	CA	IAC-18.A3.4A.2
Lange, Caroline	CA	IAC-18.B4.6A.6
Lange, Caroline	CA	IAC-18.D1.4A.3
Lange, Caroline	CA	IAC-18.A3.4B.6
Lange, Christian	CA	IAC-18.A3.1.1
Lange, Max	CA	IAC-18.B3.9-GTS.2.2
Lange, Michael	CA	IAC-18.A3.4A.2
Lange, Sebastian	CA	IAC-18.E1.4.4
Langelier, Marie-Kiki	CA	IAC-18.A7.3.2
Langer, Martin	CA	IAC-18.B2.2.2
Langer, Martin	CA	IAC-18.D5.1.11
Langer, Martin	CA	IAC-18.B4.6B.8
Langer, Martin	CA	IAC-18.C2.7.11
Langer, Martin	CA	IAC-18.E6.3.2
Langevin, Dominique	A	IAC-18.A2.6.6
Langford, David	CA	IAC-18.A5.1.9
Langlade, Joanna	A	IAC-18.E7.IP.10
Langlet, Cécile	CA	IAC-18.A1.1.9
Langwald, Jörg	CA	IAC-18.B4.6A.8
Lanneau, Lukas	CA	IAC-18.E1.6.3
Lapeña, Emilio	A	IAC-18.C3.4.11
Lapointe, Melanie	CA	IAC-18.B1.1.9
Lapshin, Alexander	CA	IAC-18.A6.1.1
Lara, Martin	A	IAC-18.C1.1.1
Larin, Vladimir O.	CA	IAC-18.A6.2.1
Larin, Vladimir O.	CA	IAC-18.B2.3.6
Larmour, Chris	CA	IAC-18.B4.5.9
Larouche, Benoit	A	IAC-18.C2.IP.7
Larsen, Crystal	CA	IAC-18.B3.4-B6.4.6
Larson, Lindsay	A	IAC-18.A1.1.4
Larsson, Melanie	CA	IAC-18.A1.2.23
Lasagni Manghi, Riccardo	CA	IAC-18.B4.8.12
Lassakeur, Abdelmadjid	CA	IAC-18.B4.3.5
Lassakeur, Abdelmadjid	A	IAC-18.E2.4.1
Latif, Muhammad	A	IAC-18.B2.3.10
Latini, Valentina	CA	IAC-18.A1.6.2
Latorre, Antonio	CA	IAC-18.C1.5.5
Lauderdale, Walter	CA	IAC-18.D2.1.6
Laudet, Philippe	CA	IAC-18.A3.3B.5
Lauer, Charles	A	IAC-18.B3.2.11
Lauer, Charles	A	IAC-18.D2.5.6
Lauer, Charles	A	IAC-18.D2.9-D6.2.4
Laufer, Rene	CA	IAC-18.D2.2.12
Laufer, Rene	CA	IAC-18.D2.IP.16
Laufer, Rene	CA	IAC-18.A2.5.2
Laufer, Rene	CA	IAC-18.B4.9-GTS.5.1
Laurens, Sophie	A	IAC-18.A6.9.3
Laurenzi, Susanna	A	IAC-18.C2.6.5
Laurenzi, Susanna	CA	IAC-18.C2.6.6
Laurenzi, Susanna	A	IAC-18.C2.IP.5
Laureys, Steven	CA	IAC-18.A1.2.14
Laurini, Daniele	CA	IAC-18.B3.7.1
Laurini, Daniele	CA	IAC-18.B3.7.4
Laurini, Kathy	A	IAC-18.A3.1.1
Laurini, Kathy	CA	IAC-18.A5.1.2
Lavagna, Michèle	A	IAC-18.B4.2.11
Lavagna, Michèle	CA	IAC-18.B6.3.7
Lavagna, Michèle	CA	IAC-18.C1.1.11
Lavagna, Michèle	CA	IAC-18.C1.3.8
Lavagna, Michèle	CA	IAC-18.D1.3.2
Lavagna, Michèle	CA	IAC-18.D1.3.3
Lavagna, Michèle	CA	IAC-18.A3.4A.8
Lavagna, Michèle	CA	IAC-18.A3.IP.24
Lavagna, Michèle	CA	IAC-18.A3.IP.31
Lavagna, Michèle	CA	IAC-18.A5.IP.2
Lavagna, Michèle	A	IAC-18.A3.2C.1
Lavagna, Michèle	CA	IAC-18.C1.8.7
LAÎNÉ, Mickaël	A	IAC-18.D3.IP.1
Le Blay, Carole	CA	IAC-18.E2.3-GTS.4.5
Le Goff, Roland	A	IAC-18.B2.7.2
Le May, Samantha	A	IAC-18.A6.7.9
Le Mouelic, Stephane	CA	IAC-18.A3.1.12
Leclerc, Christophe	CA	IAC-18.B4.2.7
Leclerc, Gilles	CA	IAC-18.B3.1.3
Ledkov, Alexander	CA	IAC-18.C1.3.9
Ledkov, Alexander	CA	IAC-18.D4.4.9
Ledkova, Tatyana	CA	IAC-18.D4.4.9
Lee, Chang Hee	CA	IAC-18.E5.3.3
LEE, Dahae	A	IAC-18.C4.5.12
Lee, Jaecheong	A	IAC-18.C4.IP.43
Lee, Jongkwang	A	IAC-18.C2.IP.20
Lee, Jongkwang	A	IAC-18.C4.IP.22
Lee, Jongkwang	A	IAC-18.C4.IP.50
Lee, Jungpyo	CA	IAC-18.C4.2.9
Lee, Jungpyo	CA	IAC-18.C4.2.10
Lee, Kerry	CA	IAC-18.A1.5.10
Lee, Kyun Ho	A	IAC-18.C4.IP.41
Lee, Sanghyun	CA	IAC-18.C1.8.3
Lee, Tong Heng	CA	IAC-18.D1.3.12
Lee, Yuseok	CA	IAC-18.C4.IP.43
Leemhuis, Anton	CA	IAC-18.B1.3.5
Leese, Mark	CA	IAC-18.A3.2B.2
Lefeber, René	CA	IAC-18.E7.5.18
Lefebvre, Luc	CA	IAC-18.B3.1.3
Lefort, Xavier	CA	IAC-18.A3.2A.3
Lehmann, Marc	CA	IAC-18.B5.1.13
Lehmann, Marc	CA	IAC-18.B4.3.1
Lehmann, Marc	CA	IAC-18.E1.4.4
Lehmann, Marc	CA	IAC-18.B4.6A.4
Lehner, Benjamin	A	IAC-18.D3.2.4
Lehner, Benjamin	A	IAC-18.D3.3.9
Lehner, Benjamin	A	IAC-18.A1.7.7
Lehner, Benjamin	A	IAC-18.A3.2C.6
Lehner, Benjamin	CA	IAC-18.A2.7.12
Lehner, Benjamin	CA	IAC-18.C2.9.12
Lehner, Benjamin	CA	IAC-18.D4.5.10
Lehner, Hannah	CA	IAC-18.A3.2A.8
Lehner, Peter	CA	IAC-18.A3.2A.8
Lei, Jiuhou	CA	IAC-18.A6.9.2
Lei, Wang	CA	IAC-18.C4.9.9
Lei, Zhe	CA	IAC-18.A2.2.15
Leidner, Daniel	CA	IAC-18.B3.6-A5.3.5
Leitgab, Martin	CA	IAC-18.A1.5.10
Lelli, Luca	A	IAC-18.B1.3.7
Lemack, Carie	CA	IAC-18.E1.4.1
Lemack, Carie	A	IAC-18.E1.IP.4
Lemack, Carie	CA	IAC-18.E1.2.10
Lemeshevsky, Sergei Antonovich	A	IAC-18.A3.2A.4
Lemeshevsky, Sergei Antonovich	CA	IAC-18.A3.3A.3
Lemeshevsky, Sergei Antonovich	A	IAC-18.A3.IP.14
Lemeshevsky, Sergei Antonovich	A	IAC-18.A3.IP.64
Lemeshevsky, Sergei Antonovich	CA	IAC-18.B1.IP.18
Lemeshevsky, Sergei Antonovich	CA	IAC-18.D2.8-A5.4.3
Lemke, Norbert M.K.	A	IAC-18.B4.2.12
Lemke, Norbert M.K.	A	IAC-18.B3.3.12
Lemke, Norbert M.K.	A	IAC-18.B4.9-GTS.5.5
Lemmens, Stijn	CA	IAC-18.A6.2.8
Lemmens, Stijn	CA	IAC-18.A6.4.2
Lemmens, Stijn	CA	IAC-18.A6.10-C1.7.8
Lemmon, Mark	CA	IAC-18.B4.2.9
Lenard, Roger X.	A	IAC-18.D4.5.1
Lenard, Roger X.	A	IAC-18.D4.5.2
Lenard, Roger X.	CA	IAC-18.D4.5.4
Lengowski, Michael	CA	IAC-18.A7.3.7
Lengyel, David M.	A	IAC-18.D5.2.9
Lengyel, David M.	A	IAC-18.E3.6.7
Lenic, Joachim	CA	IAC-18.A1.3.3
Lenic, Joachim	CA	IAC-18.A1.3.20
Lenic, Joachim	CA	IAC-18.A2.IP.5
Lenic, Joachim	CA	IAC-18.A1.7.8
Lenti, Fabrizio	CA	IAC-18.B1.1.11
Lentini, Giuseppe	CA	IAC-18.B3.7.7
Lentz, Harald	CA	IAC-18.B4.8.9
Leonardi, Claudio	CA	IAC-18.A5.2.7
Leonardi, Claudio	CA	IAC-18.A3.IP.44
Leonov, Victor	A	IAC-18.E1.7.3
Leonov, Victor	A	IAC-18.C2.IP.16
Leonov, Victor	A	IAC-18.D1.IP.3
Leonov, Victor	A	IAC-18.E1.IP.35
Lequette, Nicolas	CA	IAC-18.C4.6.3
LEROY, Alix	A	IAC-18.B2.8-GTS.3.9
Leschinski, Kieran	CA	IAC-18.A7.2.6
Letier, Pierre	CA	IAC-18.D3.2.12
Letier, Pierre	CA	IAC-18.D3.IP.2
Letizia, Francesca	A	IAC-18.A6.4.2
Letterio, Federico	CA	IAC-18.A6.4.6
Leung, Alice	CA	IAC-18.E1.4.7
Leventiu, Constantin	CA	IAC-18.C4.9.12
Levin, David	CA	IAC-18.A1.6.6
Levine, Howard	A	IAC-18.A1.8.12
Levkina, Polina	A	IAC-18.A6.IP.43
Lewis, Hugh G.	CA	IAC-18.A6.4.8
Lewis, Tim	A	IAC-18.C2.9.4
Lewyckyj, Nicolas	CA	IAC-18.B1.5.7
Lezius, Matthias	CA	IAC-18.A2.1.9
León Pérez, Laura	CA	IAC-18.A6.6.4
León Pérez, Laura	CA	IAC-18.B2.7.5
Li, Dun	A	IAC-18.A6.IP.38
Li, Feng	CA	IAC-18.C3.3.12
Li, Gaoliang	CA	IAC-18.A6.IP.25

Li, Haiyang	A	IAC-18.C1.8.4
Li, Huan	CA	IAC-18.A4.1.8
LI, Jiang	CA	IAC-18.C4.2.3
Li, Jingdong	CA	IAC-18.B4.6A.7
Li, Jingtao	CA	IAC-18.B2.2.13
Li, Jinxian	CA	IAC-18.C4.IP.13
LI, LAN	CA	IAC-18.D5.4.2
Li, Lijing	CA	IAC-18.B2.IP.12
Li, Longfei	A	IAC-18.D4.IP.4
Li, Michael	CA	IAC-18.B4.4.6
Li, Ming	CA	IAC-18.A6.3.1
Li, Ming	A	IAC-18.A2.IP.16
Li, Ming	CA	IAC-18.A6.IP.23
Li, Ming	A	IAC-18.B1.IP.29
Li, Mingtao	A	IAC-18.C1.IP.24
Li, Mingtao	CA	IAC-18.C1.IP.28
Li, Nan	A	IAC-18.D1.3.8
Li, Peng	A	IAC-18.C3.IP.5
Li, Rui	CA	IAC-18.A3.3B.2
Li, Shengyang	CA	IAC-18.D1.3.8
Li, Shuai	A	IAC-18.D1.IP.19
Li, Shuang	CA	IAC-18.D2.3.13
Li, Shuang	CA	IAC-18.A3.IP.42
Li, Tingli	CA	IAC-18.B2.3.11
Li, Xiangyu	A	IAC-18.A3.IP.11
Li, Xiaohong	CA	IAC-18.D2.5.11
Li, Xiaoqi	CA	IAC-18.A6.6.9
Li, Xiaoqiang	CA	IAC-18.D2.9-D6.2.7
Li, Xin	A	IAC-18.C4.9.7
Li, Xin	CA	IAC-18.A6.IP.20
Li, Xiongfei	CA	IAC-18.B2.IP.14
Li, Yalin	CA	IAC-18.C3.3.12
Li, Yaofang	CA	IAC-18.B4.6B.2
Li, Yi	A	IAC-18.D2.5.11
Li, Yin	CA	IAC-18.A1.4.16
Li, Yinghui	A	IAC-18.A1.3.4
Li, Yixiao	A	IAC-18.A6.IP.18
LI, You	A	IAC-18.A1.IP.24
Li, Yunfei	CA	IAC-18.D2.3.9
Li, Zhaoyu	CA	IAC-18.D2.3.5
Li, Zhi	CA	IAC-18.D4.1.13
Li Holden, King Ho	CA	IAC-18.B4.7.10
Lian, Meng	A	IAC-18.D2.2.3
Liang, Qun	A	IAC-18.C4.IP.21
Liang, Tang	CA	IAC-18.B1.IP.29
Liang, Xiubing	CA	IAC-18.B4.6A.2
Liang, Yu	CA	IAC-18.C2.4.9
Liang, Yuying	A	IAC-18.C1.2.10
Liao, Guangyue	CA	IAC-18.C3.3.7
Liao, Xavier L.W.	A	IAC-18.E3.1.14
Licciardi, Giorgio	A	IAC-18.B5.2.7
Lichtenheldt, Roy	CA	IAC-18.A3.4B.6
Liebmann, Vera	CA	IAC-18.C4.10.4
Liefland, Pascal	CA	IAC-18.E1.6.11
Lifshits, Jakob	CA	IAC-18.C4.8-B4.5A.12
Ligori, Michael	CA	IAC-18.B4.4.8
Lii, Neal	A	IAC-18.B3.6-A5.3.5
Lill, Alexander	CA	IAC-18.B2.2.2
Lim, Patricia Angela	CA	IAC-18.D1.1.6
Lim, Zheng Jie (Zee)	CA	IAC-18.E1.4.7
Lim, Zhi Qi Jade	CA	IAC-18.B6.IP.2
Lima, Glaydson L. B.	CA	IAC-18.C2.2.5
Lima, Glaydson L. B.	CA	IAC-18.C2.IP.9
Lima, Jeanne Samara S	A	IAC-18.D3.4.12
Lin, Chai	CA	IAC-18.B2.4.7
Lin, Chai	A	IAC-18.B3.7.11
Lin, Hou-Yuan	A	IAC-18.A6.IP.7
Lin, Qingguo	CA	IAC-18.C4.1.15
Lin, Tse	CA	IAC-18.A5.1.5
Lin, Tse	CA	IAC-18.D2.8-A5.4.6
Linck, Evan	CA	IAC-18.E3.3.9
Linck, Evan	CA	IAC-18.E1.7.13
Lindblad, Louise	A	IAC-18.D3.4.6
Lindblad, Louise	CA	IAC-18.E3.6.9
Lindemann, Felix	A	IAC-18.D2.6.5
Lindner, Claudia	A	IAC-18.E1.2.1
Lindner, Robert	CA	IAC-18.A3.2B.7
Ling, Su	CA	IAC-18.B3.9-GTS.2.9
Lingham, Marcus	CA	IAC-18.A6.6.3
Linhart, Bernd	CA	IAC-18.B3.IP.9
Link, Mathias	CA	IAC-18.E1.5.8
Linke, Stefan	CA	IAC-18.A3.2B.11
Linke, Stefan	CA	IAC-18.C3.3.7
Linke, Stefan	A	IAC-18.A3.2C.5
Linnartz, Harold	CA	IAC-18.A1.6.3
Linton, Nancy	CA	IAC-18.B2.1.5
Lipaev, Andrey M.	CA	IAC-18.A2.6.3
Lipinska, Monika	A	IAC-18.E5.1.9
Lippmann, Robert	CA	IAC-18.E1.4.4
Lips, Tobias	CA	IAC-18.A6.2.3
Lips, Tobias	CA	IAC-18.A6.6.4
Lipsitz, Stuart	CA	IAC-18.A1.3.5
Lishnevskii, Andrey	CA	IAC-18.A1.5.11
Lisitsyna, Ksenia	A	IAC-18.E6.1.2
Lissinna, Callie	A	IAC-18.E1.IP.1
List, Meike	A	IAC-18.A2.1.2
List, Meike	CA	IAC-18.A2.1.3
List, Meike	CA	IAC-18.C1.IP.11
List, Meike	CA	IAC-18.D1.IP.32
Liu, Bo	CA	IAC-18.D5.1.12
Liu, Changguo	A	IAC-18.C4.1.15
LIU, CHAOZHEN	CA	IAC-18.B4.7.7
Liu, Fangwu	CA	IAC-18.A2.5.12
Liu, Guanghui	A	IAC-18.B4.6B.2
Liu, Hongjin	CA	IAC-18.D5.1.12
Liu, Hongxia	CA	IAC-18.D1.3.7
LIU, JIA	A	IAC-18.C4.IP.42
Liu, Jia	A	IAC-18.A1.8.10
Liu, Jiangong	CA	IAC-18.B2.1.9
Liu, Jiayu	A	IAC-18.A6.6.9
Liu, Li	CA	IAC-18.B5.3.10
Liu, Liang	CA	IAC-18.B2.3.7
Liu, Lin	CA	IAC-18.D2.3.9
Liu, Lin	CA	IAC-18.B2.5.10
Liu, Mei	A	IAC-18.C4.IP.40
Liu, Peijin	CA	IAC-18.C4.IP.44
Liu, Sen	CA	IAC-18.A6.3.6
Liu, Sen	CA	IAC-18.A6.IP.17
Liu, Sen	CA	IAC-18.A6.IP.20
Liu, Sen	CA	IAC-18.A6.IP.20
Liu, Shuyuan	CA	IAC-18.C4.IP.23
Liu, Weihui	CA	IAC-18.A3.3B.2
Liu, Weiwei	CA	IAC-18.C2.IP.26
Liu, Xiaoxu	CA	IAC-18.B2.IP.14
LIU, YAN	A	IAC-18.A2.4.13
LIU, YANG	CA	IAC-18.C4.2.3
Liu, Yang	A	IAC-18.D6.3.6
Liu, Yanmin	CA	IAC-18.C3.2.2
Liu, Ye	A	IAC-18.B2.IP.8
Liu, Yijia	CA	IAC-18.C2.4.9
Liu, Yunpeng	CA	IAC-18.A4.1.8
Liu, Zhanyi	CA	IAC-18.C4.IP.36
Liu, Zhanyi	CA	IAC-18.C4.IP.37
Liu, Zunlong	CA	IAC-18.A6.IP.25
Livadiotti, Sabrina	CA	IAC-18.B4.2.2
Livadiotti, Sabrina	CA	IAC-18.C4.6.4
Livens, Stefan	CA	IAC-18.B4.4.7
Liverud, Anders Erik	CA	IAC-18.B3.7.4
Lizy-Destrez, Stéphanie	CA	IAC-18.E2.4.4
Lizy-Destrez, Stéphanie	CA	IAC-18.B3.6-A5.3.7
Lièvre, Nicolas	CA	IAC-18.A6.1.7
Lobascio, Cesare	CA	IAC-18.B3.7.5
Lock, Robert	CA	IAC-18.A3.3A.6
Lockowandt, Christian	CA	IAC-18.D2.2.5
Lockowandt, Christian	A	IAC-18.A2.5.9
Lockowandt, Christian	CA	IAC-18.A7.3.7
Lockowandt, Christian	A	IAC-18.D2.6.7
Lodhi, Muhammad Kamran	A	IAC-18.B1.IP.27
Lofstad, Victoria	CA	IAC-18.A7.2.6
Lognonné, Philippe	CA	IAC-18.A3.3B.5
Lohse, Alexander	CA	IAC-18.B2.6.6
Lohvynenko, Anatolii	CA	IAC-18.A6.4.5
Loi, Francesca	CA	IAC-18.A4.1.9
Loke, Victor	CA	IAC-18.D1.3.12
Loke, Victor	A	IAC-18.B6.IP.2
Lomaka, Igor	A	IAC-18.B6.3.11
Lombardi, Eleonora	A	IAC-18.B5.1.4
Lombardi, Eleonora	CA	IAC-18.B5.2.7
Lombardi, Lucia	CA	IAC-18.C2.8.5
Lombardi, Mariangela	CA	IAC-18.C2.8.10
Lombardi, Mariangela	CA	IAC-18.C2.9.8
Long, George Anthony	A	IAC-18.E7.5.12
Long, George Anthony	A	IAC-18.A6.8.10
Long, Kelvin	A	IAC-18.A7.1.7
Long, Kelvin	A	IAC-18.C4.6.10
Long, Kelvin	A	IAC-18.A4.2.8
Looper, Samuel	CA	IAC-18.E2.3-GTS.4.7
Lopes de Oliveira e Souza, Marcelo	CA	IAC-18.E3.4.12
Lopez Cenamor, Pablo	CA	IAC-18.C3.4.11
LOPEZ REIG, Jorge	A	IAC-18.C4.4.6
Lopez Roldan, Lourdes Glafira	A	IAC-18.E1.IP.7
Lopez Telgie, Alejandro	A	IAC-18.B4.1.5
Lopez Urdiales, Jose Mariano	A	IAC-18.B3.2.6
Lorda, Laurence	CA	IAC-18.A3.4A.2
Lordos, George	A	IAC-18.A5.2.8
Lorefice, Fabio	CA	IAC-18.E1.6.3
Lorenzini, Enrico C.	CA	IAC-18.A7.2.10
Loru, Sara	CA	IAC-18.A4.1.9
Lorusso, Rino	A	IAC-18.B1.2.13
Losacco, Matteo	CA	IAC-18.A6.1.9
Losacco, Matteo	CA	IAC-18.E2.1.7
Losacco, Matteo	A	IAC-18.A6.IP.10
Losi, Luca	CA	IAC-18.D1.3.2
Losi, Luca	A	IAC-18.A3.IP.24
Lostroscio, Kaitlin	A	IAC-18.A1.3.8
Lotufo, Mauricio Alejandro	CA	IAC-18.C1.IP.26
Lotzmann, Ulrich	CA	IAC-18.A1.4.18
Louis J., Ghosn	CA	IAC-18.C2.1.11
Loureiro, Geilson	CA	IAC-18.D1.4A.4
Loureiro, Geilson	CA	IAC-18.D1.IP.12
Loureiro, Joao Pedro	CA	IAC-18.C2.2.9
Lours, Philippe	CA	IAC-18.E2.4.6
Lousada, Joao	CA	IAC-18.B3.4-B6.4.4
Lousada, Joao	CA	IAC-18.B3.9-GTS.2.5
Lousada, Joao	CA	IAC-18.B3.9-GTS.2.10
Lousada, Joao	CA	IAC-18.B3.5.6
Lousada, Joao	CA	IAC-18.A3.IP.7
Love, John	A	IAC-18.A2.7.16
Lovtsov, Alexander	A	IAC-18.C4.4.4
Loza, Oleksandr	A	IAC-18.D1.3.11
Lozano, Emilio	A	IAC-18.B4.6A.9
Lozano, Paulo	A	IAC-18.C4.8-B4.5A.1
Lu, George	CA	IAC-18.E2.3-GTS.4.7
Lu, Shan	CA	IAC-18.C1.3.10
Lu, Xinyuan	A	IAC-18.C1.IP.17
Lu, Yi	A	IAC-18.D5.2.11
Lu, Yu	CA	IAC-18.D4.IP.11
Lucchese, Riccardo	CA	IAC-18.A2.3.7
Lucchesi, David	CA	IAC-18.C1.1.12
Lucchesi, David	CA	IAC-18.A7.2.10
Luchena, Daniele	A	IAC-18.D1.3.6
Luchitskaya, Elena	CA	IAC-18.A1.2.1
Luchitskaya, Elena	CA	IAC-18.A1.2.2
Luchitskaya, Elena	A	IAC-18.A1.2.4
Luchitskaya, Elena	CA	IAC-18.A1.2.5
Luchkova, Tanja	CA	IAC-18.D6.3.9
Lucic, Tajana	CA	IAC-18.B3.9-GTS.2.10
Lucic, Tajana	CA	IAC-18.B3.5.6
Lucic, Tajana	CA	IAC-18.E5.5.4
Lucken, Romain	A	IAC-18.A6.IP.12
Ludban, Debra	CA	IAC-18.B3.1.8
Ludivig, Philippe	A	IAC-18.A3.IP.8
Ludwig, Klaus-Peter	CA	IAC-18.A1.7.1
Lueck, Wolfgang	A	IAC-18.B1.5.9
Luis, Diana	CA	IAC-18.E2.3-GTS.4.9
Lukasik, Artur	CA	IAC-18.A6.6.10
Lukaszynski, Pawel	CA	IAC-18.B4.4.8
Lulli, Roberto	A	IAC-18.A4.1.5
Lum, Chune Yang	CA	IAC-18.D5.4.4
Lund, Matthew	A	IAC-18.A1.5.4
Lund, Thomas	CA	IAC-18.A5.1.6
Lunesu, Maria Ilaria	CA	IAC-18.A4.1.9
Lunghi, Paolo	CA	IAC-18.B4.2.11
Lunghi, Paolo	A	IAC-18.D1.3.2
Lunghi, Paolo	CA	IAC-18.A3.2C.1
LUO, Jianjun	CA	IAC-18.C1.4.6
Luo, Jianjun	CA	IAC-18.C1.IP.17
Luo, Jiaqi	CA	IAC-18.A2.7.15
Luo, Kai	A	IAC-18.D5.1.7
Luo, Qing	CA	IAC-18.A6.IP.20
Luo, Xuhui	CA	IAC-18.A6.10-C1.7.3
Lupu, Elena Sorina	CA	IAC-18.C1.6.3
Luque Arriero, Daniel	CA	IAC-18.D4.1.8
Luque Arriero, Daniel	CA	IAC-18.A5.1.5
Luque Arriero, Daniel	CA	IAC-18.D2.8-A5.4.6
Luzzi, Erica	CA	IAC-18.A3.1.12
Lv, Xiang	CA	IAC-18.D2.9-D6.2.7
Lybekk, Bjorn	CA	IAC-18.B4.3.3
Lyles, Garry	A	IAC-18.D2.1.4
Lyons, Rachel	CA	IAC-18.B4.2.2
Lyons, Rachel	CA	IAC-18.C4.6.4
Lyons, Rhonda	A	IAC-18.A2.IP.3
Lysova, Natalya	CA	IAC-18.A1.2.7
Lysova, Natalya	CA	IAC-18.A1.2.9
Lyu, Peng	A	IAC-18.B2.3.11
Lyubinskaya, Natalia	CA	IAC-18.C4.4.11
Läkk, Hanna	A	IAC-18.E5.1.7
Läkk, Hanna	A	IAC-18.E5.1.8
Lämmerzahl, Claus	CA	IAC-18.A2.1.3
Lämmerzahl, Claus	A	IAC-18.A2.1.5
Lämmerzahl, Claus	CA	IAC-18.A2.1.11
Lämmerzahl, Claus	CA	IAC-18.A2.1.15
Lämmerzahl, Claus	CA	IAC-18.B3.IP.13
Läufer, Andreas	CA	IAC-18.A1.6.12
López, Rosario	CA	IAC-18.C1.1.2
López Camargo, Omar Andrés	CA	IAC-18.E1.3.5
López Soriano, Pablo	CA	IAC-18.A3.IP.5
Löhmannsröben, Hans-Gerd	CA	IAC-18.A1.6.3
Löscher, Armin	CA	IAC-18.B1.2.7
Lübberstedt, Hendrik	CA	IAC-18.B2.1.2
Lüdemann, Jürgen	A	IAC-18.E2.1.9
Lüdtke, Daniel	CA	IAC-18.B4.6A.8
Lüdtke, Daniel	CA	IAC-18.A2.5.6
Lützenberg, Ronald	CA	IAC-18.A2.7.11

M

Name	Role	Paper
M, Ajith	A	IAC-18.C4.10.12
M, Karthik	CA	IAC-18.B4.6B.12
M, Ponnuswamy	CA	IAC-18.C4.3.13
M, Sudeep	CA	IAC-18.A1.8.5
Ma, Chuan	A	IAC-18.A6.5.7
Ma, Jingting	A	IAC-18.A6.IP.25
Ma, Kai	A	IAC-18.C4.9.14
MA, LIANG	A	IAC-18.E6.2.6
Ma, Lin	A	IAC-18.D2.IP.5
Ma, Qianying	A	IAC-18.A1.1.5
Ma, Weihua	CA	IAC-18.D2.2.3
Ma, Xiuping	CA	IAC-18.C2.4.9
Ma, Yanyan	CA	IAC-18.D1.IP.19
Ma, Zhaoxia	CA	IAC-18.A6.3.6
Ma, Zhong	A	IAC-18.A6.IP.27
Maaß, Alexander	CA	IAC-18.B2.6.6
Maccone, Claudio	CA	IAC-18.A4.1.9
Maccone, Claudio	CA	IAC-18.A4.1.11
Maccone, Claudio	A	IAC-18.A4.2.5
MacDonald, Alexander	A	IAC-18.A3.2A.2
MacDonald, John	CA	IAC-18.A6.2.9
Macdonald, Malcolm	CA	IAC-18.A6.6.4

Macedo Andrade, Angela	CA	IAC-18.C2.IP.3
Machchhar, Deep	CA	IAC-18.E2.4.10
Machel, Gordon	CA	IAC-18.A7.IP.4
Machuca, Pablo	CA	IAC-18.E2.3-GTS.4.11
Machuca, Pablo	A	IAC-18.C1.9.9
Machula, Mike	CA	IAC-18.D6.1.5
MacIntosh, Matthew	CA	IAC-18.D3.2.5
Maciulis, Laurynas	A	IAC-18.B2.7.7
Madhu, Shreesha	CA	IAC-18.B4.6B.12
Madi, Mohammad	CA	IAC-18.D4.2.8
Madsack, Andreas	CA	IAC-18.B4.3.8
Maeda, George	CA	IAC-18.B4.1.1
Maeda, George	A	IAC-18.B4.1.13
Maeda, George	CA	IAC-18.E5.4.7
Maeda, Jun	A	IAC-18.D4.3.13
Maeda, Jun	CA	IAC-18.D4.3.16
Maekawa, Kazuhiko	CA	IAC-18.C3.2.8
Maeke-Kail, Matthias	A	IAC-18.D3.1.7
Maestrini, Michele	A	IAC-18.C1.9.13
Maestro, Greg	CA	IAC-18.E1.IP.30
Maestroni, Elia	CA	IAC-18.C1.IP.29
Maffione, Federica	CA	IAC-18.A5.2.4
Magarotto, Mirko	CA	IAC-18.C4.8-B4.5A.2
Magchiels, Goele	CA	IAC-18.C2.8.3
Magda, Geoffrey	CA	IAC-18.C4.6.3
Maggioni, Martina Anna	CA	IAC-18.A1.2.10
Maggioni, Martina Anna	A	IAC-18.A1.2.24
Maggioni, Martina Anna	A	IAC-18.A1.4.4
Maggioni, Martina Anna	CA	IAC-18.A1.4.7
Maggioni, Martina Anna	CA	IAC-18.A1.4.12
Maggioni, Martina Anna	CA	IAC-18.A1.4.21
Maggioni, Martina Anna	CA	IAC-18.A1.7.1
Maggiore, Paolo	CA	IAC-18.C2.8.10
Maggiore, Paolo	CA	IAC-18.C2.9.8
Magiera, Robert	CA	IAC-18.B6.IP.5
Magiera, Robert	CA	IAC-18.D2.IP.9
Magiera, Robert	CA	IAC-18.D2.9-D6.2.10
Magnin, Thibault	CA	IAC-18.A5.1.5
Magnin, Thibault	CA	IAC-18.B4.7.9
Magro, Alessio	CA	IAC-18.A6.1.9
Magro, Alessio	CA	IAC-18.A6.IP.10
MAHESH, V	CA	IAC-18.C4.IP.49
Mahmoudi, S. Hadi	A	IAC-18.E7.5.6
Maibaum, Michael	CA	IAC-18.A3.4A.2
Maibaum, Olaf	CA	IAC-18.A2.5.6
Maiden, David	CA	IAC-18.E2.3-GTS.4.11
Maier, Annika	CA	IAC-18.C2.5.1
Maier, Philipp	A	IAC-18.A7.3.7
Maier, Thomas	CA	IAC-18.C4.5.8
MAILY, Maxime	CA	IAC-18.A5.1.5
MAILY, Maxime	CA	IAC-18.B4.7.9
Mains, Deanna	CA	IAC-18.A6.2.11
Maiwald, Volker	CA	IAC-18.B3.9-GTS.2.2
Maiwald, Volker	A	IAC-18.C1.8.2
Maiwald, Volker	CA	IAC-18.A3.4B.6
Majewska, Ewa	CA	IAC-18.A6.5.9
Makaya, Advenit	CA	IAC-18.C2.5.4
Makaya, Advenit	CA	IAC-18.D3.3.7
Makinen, Jari	A	IAC-18.E1.7.2
Maksimov, Andrey	CA	IAC-18.E6.1.2
Makushenko, Yury	A	IAC-18.A5.1.11
Malan, Francois	A	IAC-18.B1.1.6
Maleix, Corentin	CA	IAC-18.C4.5.3
Malhotra, Vinayak	A	IAC-18.A2.4.3
Malhotra, Vinayak	A	IAC-18.D6.3.1
Malhotra, Vinayak	A	IAC-18.C2.IP.21
Malik, Muhammad Shoaib	A	IAC-18.B6.1.5
Malinowska, Katarzyna	A	IAC-18.E7.IP.13
Mallik, Vishnuu	A	IAC-18.A6.10-C1.7.2
Malloy, Samuel	A	IAC-18.B1.5.6
Malloy, Samuel	A	IAC-18.B1.IP.28
Malvache, Arnaud	CA	IAC-18.E1.9.9
Malyutin, Ivan	CA	IAC-18.A6.IP.5
Mamais, Eleftherios	A	IAC-18.B1.IP.10
Mammarella, Martina	A	IAC-18.D2.4.9
Mammarella, Martina	A	IAC-18.C4.6.6
Mammarella, Martina	CA	IAC-18.D2.8-A5.4.7
Mammarella, Martina	A	IAC-18.D2.8-A5.4.10
Mancas, Alexandru	CA	IAC-18.A6.IP.34
Mancinelli, Rocco L.	CA	IAC-18.A1.3.18
Mancini, Daniela	CA	IAC-18.E3.6.5
Mandigma, Catherine Raisa Kimberly P.	CA	IAC-18.D4.2.13
Mando, Yuki	A	IAC-18.A6.3.2
Manente, Marco	A	IAC-18.C4.8-B4.5A.2
Mangiarotti, Massimo	A	IAC-18.C2.IP.10
Mango, Davide	CA	IAC-18.D3.IP.7
Mangold, Nicolas	CA	IAC-18.A3.1.12
Mani, Karthik Venkatesh	CA	IAC-18.A3.2A.7
Mani, Karthik Venkatesh	CA	IAC-18.C1.6.13
Mani, Karthik Venkatesh	A	IAC-18.C4.6.2
Mani, Karthik Venkatesh	CA	IAC-18.B4.8.5
Mani, Vipul	CA	IAC-18.A5.2.14
Mani, Vipul	A	IAC-18.A3.3B.12
Manieri, Pierfilippo	CA	IAC-18.A1.6.2
Manieri, Pierfilippo	CA	IAC-18.A1.IP.17
Manis, Erika	A	IAC-18.E6.2.12
Mankins, John C.	A	IAC-18.C3.1.1
Mankins, John C.	A	IAC-18.C3.1.11
Mankins, John C.	A	IAC-18.D3.1.1
Mankins, John C.	A	IAC-18.C3.2.1
Mankins, John C.	A	IAC-18.D3.2.2
Manli, Guo	A	IAC-18.C4.IP.19
Mano, Tadaaki	CA	IAC-18.A1.2.16
Mano, Tadaaki	CA	IAC-18.A1.3.2
Manoja J, Daffini	CA	IAC-18.D1.IP.10
Mansouri, Jamila	CA	IAC-18.D2.4.5
Mantas, Vasco	CA	IAC-18.B1.5.7
Mantellato, Riccardo	CA	IAC-18.C4.8-B4.5A.2
Mantilla, Juan	CA	IAC-18.E1.3.5
Mantilla, Juan	CA	IAC-18.E5.1.12
Mantilla, Juan	CA	IAC-18.A1.IP.39
Manyapu, Kavya K.	A	IAC-18.A1.7.11
Manzano-Pérez, Aranzazu	CA	IAC-18.A2.7.17
Manzella, David	CA	IAC-18.B3.1.8
MANZOOR, ROZAN	CA	IAC-18.C4.IP.24
Mao, Junkui	CA	IAC-18.C4.9.15
Mao, Liheng	CA	IAC-18.D2.8-A5.4.8
Mao, Qingyun	CA	IAC-18.D4.1.5
Mao, Qingyun	A	IAC-18.D4.1.14
Marabottini, Cristina	CA	IAC-18.E7.2.2
Maranan, Diego	CA	IAC-18.A1.3.7
Marboe, Irmgard	A	IAC-18.E3.5-E7.6.2
Marboe, Irmgard	A	IAC-18.E7.5.17
Marburger, Jean Pierre	CA	IAC-18.A2.1.8
Marc, Róbert	A	IAC-18.D3.3.2
Marc, Xavier	CA	IAC-18.C1.IP.29
March, Kieran	CA	IAC-18.E2.3-GTS.4.11
Marchetti, Andrea	CA	IAC-18.C4.IP.53
Marchetti, Mario	CA	IAC-18.C2.IP.19
Marchetti, Mario	CA	IAC-18.C2.8.1
Marchi, Luis	A	IAC-18.C1.2.12
Marchis, Franck	A	IAC-18.E1.9.9
Marchisio, Sergio	A	IAC-18.E3.5-E7.6.1
Marcil, Isabelle	CA	IAC-18.B3.3.3
Marciniak, Blazej	CA	IAC-18.A6.5.9
Marco, Victor	CA	IAC-18.D1.2.1
Marcos, Andres	CA	IAC-18.C1.5.3
Marcu, Sebastian	A	IAC-18.B3.IP.3
Marcu, Sebastian	A	IAC-18.A2.6.14
Mares, Vladimir	CA	IAC-18.A1.5.1
Mares, Vladimir	CA	IAC-18.C2.6.8
Marfisi, Laurent	CA	IAC-18.E1.9.9
Margaritis, Athanasios	CA	IAC-18.E2.3-GTS.4.9
Margheritis, Diana	A	IAC-18.A3.3A.10
Margheritis, Diana	CA	IAC-18.A3.5.11
Mariani, Lilis	CA	IAC-18.B1.1.13
Mariani, Lorenzo	CA	IAC-18.A6.9.8
Mariani, Lorenzo	CA	IAC-18.A6.IP.11
Mariani, Lorenzo	CA	IAC-18.A6.IP.36
Mariani, Marco	CA	IAC-18.A1.6.2
Marin, Marc	CA	IAC-18.B5.1.11
Mariscal, Juan Carlos	A	IAC-18.D3.1.6
Mariscal, Juan Carlos	CA	IAC-18.D3.4.11
Mariën, Geraldine	CA	IAC-18.E1.2.3
Markgraf, Sebastian	CA	IAC-18.B3.7.1
Marletta, Francesca	CA	IAC-18.C2.9.6
Marlow, Weston	CA	IAC-18.B2.8-GTS.3.1
Marmuse, Florian	CA	IAC-18.C4.6.3
Marosy, Gabor	CA	IAC-18.A1.5.2
Marquardt, Christoph	CA	IAC-18.B4.2.12
Marques, Tiago	CA	IAC-18.E1.5.4
Marquez, Jessica	CA	IAC-18.B3.4-B6.4.6
Marquis, Andreas	A	IAC-18.E2.3-GTS.4.7
Marquis, Kyle	A	IAC-18.E2.3-GTS.4.12
Marraffa, Lionel	CA	IAC-18.D2.3.4
Marsalek, Karel	CA	IAC-18.A1.5.10
Marshall, Michael	CA	IAC-18.B4.2.7
Marteau, Eloise	CA	IAC-18.D1.4B.1
Martel, Joachim	CA	IAC-18.B4.8.9
Martelo, Antonio	CA	IAC-18.D1.4A.3
Martelo, Antonio	A	IAC-18.D1.IP.13
Martelo, Antonio	CA	IAC-18.D1.4B.8
Martens, Hauke	CA	IAC-18.D2.6.1
Martimort, Philippe	CA	IAC-18.D1.4A.2
Martin, Gary	A	IAC-18.E1.5.8
Martin, Iain	CA	IAC-18.D1.3.4
Martin, Johannes	CA	IAC-18.A1.7.4
Martin, Johannes	CA	IAC-18.A1.7.6
Martin Fischer, Philipp	CA	IAC-18.D1.4A.3
Martin-Lagarde, Marine	A	IAC-18.A7.2.6
Martin-Torres, Javier	CA	IAC-18.B1.3.11
Martin-Torres, Javier	CA	IAC-18.A3.3B.8
Martinez, Esteban	CA	IAC-18.B4.1.4
Martinez, Esteban	A	IAC-18.E2.1.5
Martinez, Larry	A	IAC-18.E7.4.1
Martinez, Peter	CA	IAC-18.D2.2.12
Martinez, Peter	CA	IAC-18.B4.4.11
Martinez, Peter	A	IAC-18.E3.4.1
Martinez, Peter	CA	IAC-18.E5.2.9
Martinez, Peter	CA	IAC-18.E5.4.4
Martinez, Peter	CA	IAC-18.A2.5.2
Martinez, Peter	CA	IAC-18.B4.9-GTS.5.1
Martinez Espinoza, Federico Arturo	CA	IAC-18.E1.IP.26
Martinez Martin, Fernando	CA	IAC-18.D3.4.5
Martinez Ontiveros, Jose A.	A	IAC-18.D5.2.4
Martinez-Calvo, Borja	CA	IAC-18.C2.3.1
Martinez-Gonzalez, Xavier	CA	IAC-18.D1.2.7
Martino, Paolo	CA	IAC-18.A3.4A.5
Martins, Zita	CA	IAC-18.A1.6.3
Martins, Zita	CA	IAC-18.A1.6.8
Martucci, Alessandro	A	IAC-18.D3.IP.7
Martucci di Scarfizzi, Giovanni	CA	IAC-18.B6.3.6
Martín, Javier	CA	IAC-18.A3.3A.5
Martín-García, César	CA	IAC-18.C2.1.5
Martín-Torres, Javier	CA	IAC-18.A2.3.7
Martín-Torres, Javier	CA	IAC-18.A3.IP.41
Martínez Cerdá, José María	CA	IAC-18.C3.4.11
Martínez Díez, Daniel	CA	IAC-18.A5.1.5
Marume, Kyohei	A	IAC-18.A1.3.2
Marx, Pierre	CA	IAC-18.A3.IP.13
Marzioli, Paolo	CA	IAC-18.E1.3.7
Marzioli, Paolo	A	IAC-18.B2.3.5
Marzioli, Paolo	A	IAC-18.A1.6.9
Marzioli, Paolo	CA	IAC-18.A6.IP.36
Marzioli, Paolo	A	IAC-18.A6.10-C1.7.9
Marzioli, Paolo	A	IAC-18.B4.6B.10
Marzioli, Paolo	CA	IAC-18.B2.7.4
Marzo, Cosimo	CA	IAC-18.B2.8-GTS.3.1
Marzo, Cosimo	CA	IAC-18.A6.IP.41
Masali, Melchiorre	CA	IAC-18.A3.IP.69
Masatli, Zeynep	CA	IAC-18.A1.IP.21
Mascetti, Gabriele	CA	IAC-18.B4.8.1
Masdemont, Josep J.	CA	IAC-18.C1.1.3
Masdemont, Josep J.	CA	IAC-18.C1.2.1
Masdemont, Josep J.	CA	IAC-18.C1.2.10
Masdemont, Josep J.	CA	IAC-18.C1.9.9
Mashtakov, Yaroslav	CA	IAC-18.C1.2.4
Mashtakov, Yaroslav	CA	IAC-18.C1.4.7
Mashtakov, Yaroslav	CA	IAC-18.C1.5.7
Masillo, Silvia	CA	IAC-18.A6.10-C1.7.9
Masillo, Silvia	CA	IAC-18.B4.6B.10
Massari, Mauro	CA	IAC-18.A6.1.9
Massari, Mauro	CA	IAC-18.A3.2A.7
Massari, Mauro	CA	IAC-18.A6.IP.10
Massari, Mauro	CA	IAC-18.A6.IP.41
Massari, Mauro	CA	IAC-18.B1.IP.22
Massari, Mauro	CA	IAC-18.B4.8.5
Massari, Mauro	CA	IAC-18.C1.8.11
Massari, Mauro	CA	IAC-18.D1.6.8
Massaro, Alessandro S.	CA	IAC-18.C1.5.10
Massimiani, Chiara	CA	IAC-18.A6.5.2
Massimiani, Chiara	CA	IAC-18.C3.4.5
Massironi, Matteo	CA	IAC-18.A3.1.12
Masson, Frederic	CA	IAC-18.D3.2.6
Masson, Frederic	CA	IAC-18.D4.5.6
Masson-Zwaan, Tanja	A	IAC-18.E7.5.18
Massuti Ballester, Bartomeu	CA	IAC-18.C2.4.5
Massuti Ballester, Bartomeu	A	IAC-18.C2.4.8
Masui, Hirokazu	CA	IAC-18.D5.1.6
Masui, Hirokazu	CA	IAC-18.D5.3.4
Masui, Hirokazu	CA	IAC-18.B4.7.10
Masutti, Davide	CA	IAC-18.A6.5.2
MATAS, Attila	A	IAC-18.E7.7-B3.8.6
Matas, Ivan	A	IAC-18.E5.1.4
Matassa, Roberto	CA	IAC-18.C2.IP.19
Matassa, Roberto	CA	IAC-18.C2.8.1
Matey, Ernest	CA	IAC-18.B4.9-GTS.5.4
Mathanlal, Thasshwin	A	IAC-18.B1.3.11
Mathesius, Kelly	CA	IAC-18.D2.4.3
Mathur, Monish	CA	IAC-18.A7.IP.1
Mathur, Monish	CA	IAC-18.B4.7.5
Matloff, Gregory	CA	IAC-18.A7.2.5
Matloff, Gregory	A	IAC-18.D4.4.7
Matousek, Steve	A	IAC-18.D1.IP.4
MATSON, Douglas	CA	IAC-18.A2.6.13
Matsumoto, Haruhisa	CA	IAC-18.D1.5.6
Matsumoto, Jun	CA	IAC-18.D1.2.4
Matsumoto, Kunihiro	CA	IAC-18.B3.3.6
Matsumoto, Satoshi	A	IAC-18.A2.2.2
Matsumoto, Satoshi	CA	IAC-18.A2.7.7
Matsushita, Taishi	CA	IAC-18.A2.4.11
Matsuura, Shuji	CA	IAC-18.D1.2.4
Matsuzaki, Ichiyo	CA	IAC-18.A1.1.6
Matsuzawa, Shinji	CA	IAC-18.C1.5.4
Mattana, Andrea	CA	IAC-18.A6.1.9
Mattana, Andrea	CA	IAC-18.A6.IP.10
Matthiae, Daniel	CA	IAC-18.A1.5.10
Mattiello-Francisco, Fátima	CA	IAC-18.D3.4.12
Mattioda, Andrew	CA	IAC-18.A1.6.3
Matus, Galyna	CA	IAC-18.E8.1.1
Matusiewicz, Adam	CA	IAC-18.B2.IP.5
Matusiewicz, Adam	CA	IAC-18.B6.IP.5
Matusiewicz, Adam	CA	IAC-18.D2.IP.9
Matusiewicz, Adam	CA	IAC-18.D2.9-D6.2.10
Matuzevicius, Mantas	CA	IAC-18.B2.7.7
Matvienko, Sergei	A	IAC-18.A3.IP.70
Matviyenko, Sergiy	A	IAC-18.D2.IP.18
Maxence, Didier	A	IAC-18.C4.6.1
Maxwell, Jordan	A	IAC-18.C1.6.2
May, Stefan	CA	IAC-18.C4.2.8
Mayer, Dirk	CA	IAC-18.C2.5.13
Mayer, Hannes	A	IAC-18.E4.1.2
Mayer, Tobiasz	CA	IAC-18.C4.3.12
Mayer, Tobiasz	CA	IAC-18.D2.9-D6.2.11
Mayor, Diana	A	IAC-18.A1.3.17
Mayorova, Vera	CA	IAC-18.E1.3.11
Mayorova, Vera	A	IAC-18.E2.4.8
Mayorova, Vera	A	IAC-18.A6.IP.45
Mayorova, Vera	A	IAC-18.E1.2.9

Mazarico, Erwan	CA	IAC-18.A3.4B.8
Mazeau, Sophie	CA	IAC-18.D1.4A.11
Mazza, Andrea	CA	IAC-18.C2.8.10
Mazza, Andrea	A	IAC-18.C2.9.8
Mazzetti, Alessandro	CA	IAC-18.A3.2C.4
Mazzoleni, Andre	CA	IAC-18.A3.5.1
Mazzotta, Daniele Giuseppe	CA	IAC-18.A3.2C.6
Mbikayi, Zoe	CA	IAC-18.A5.1.9
Mbuthia, Mwangi	CA	IAC-18.B4.1.8
McAdams, James	CA	IAC-18.A5.2.2
McAvinia, Ruth	CA	IAC-18.E1.4.2
McAvinia, Ruth	A	IAC-18.A5.1.10
McAvinia, Ruth	A	IAC-18.E1.9.10
McClain Stanford, Spencer	CA	IAC-18.E1.8.3
McClean, John	CA	IAC-18.A7.2.6
McGregor, Carolyn P	CA	IAC-18.A1.4.13
McInnes, Colin R.	CA	IAC-18.D4.3.18
McKay, Chris	CA	IAC-18.E1.2.11
Mckellar, Marshall	A	IAC-18.E7.IP.16
McKenna-Lawlor, Susan	CA	IAC-18.A3.5.11
McKeown, David	CA	IAC-18.C1.IP.1
McKnight, Darren	A	IAC-18.A6.2.9
McKnight, Darren	A	IAC-18.B4.9-GTS.5.1
McMahon, Jay	CA	IAC-18.C1.2.7
McMahon, Jay	CA	IAC-18.C1.9.8
McMaster, Thomas	A	IAC-18.C2.IP.17
McMullan, Kevin	CA	IAC-18.B1.3.1
McNutt, Jr., Ralph L.	CA	IAC-18.D4.4.1
McNutt, Jr., Ralph L.	A	IAC-18.D4.4.2
McPhee, Hamish	A	IAC-18.D3.2.8
McSweeney, Adam	CA	IAC-18.A3.3A.6
McVey, John	CA	IAC-18.A6.4.3
McVey, John	CA	IAC-18.A6.7.6
Mede, Tina	A	IAC-18.E6.2.2
Medina, F. Javier	CA	IAC-18.A1.8.17
Medina, F. Javier	A	IAC-18.A2.7.17
Medina, Francisco Javier	CA	IAC-18.A1.8.2
Medvedev, Aleksandr	A	IAC-18.D2.4.6
Meerpohl, Christian	CA	IAC-18.A3.5.7
Meftah, Khalid	CA	IAC-18.B4.3.5
Mege, Daniel	CA	IAC-18.A3.IP.37
Mehta, Deepak	A	IAC-18.E1.6.3
Meier, Martin	A	IAC-18.A2.4.8
Meier, Martin	CA	IAC-18.A2.7.18
Meijer, Yasjka	CA	IAC-18.B1.2.7
Meinel, Michael	CA	IAC-18.B6.1.1
Meinel, Till Jannes	CA	IAC-18.A2.4.12
Meinert, Tobias	CA	IAC-18.D1.2.12
Meirion-Griffith, Gareth	CA	IAC-18.D1.4B.1
Meiss, Jan-Hendrik	A	IAC-18.C4.3.11
Meiss, Jan-Hendrik	CA	IAC-18.D2.6.10
Melis, Andrea	CA	IAC-18.A4.1.6
Melis, Andrea	A	IAC-18.A4.1.9
Melis, Andrea	CA	IAC-18.A4.1.11
Mellab, Karim	CA	IAC-18.D1.2.1
Mellab, Karim	CA	IAC-18.A3.4A.5
Melnik, Daniela	CA	IAC-18.A1.IP.26
Melnik, Daniela	CA	IAC-18.A1.8.9
Melnikova, Valeriia	CA	IAC-18.E2.4.8
Melo Souza, Carlos Henrique	CA	IAC-18.C2.1.4
Melo Souza, Carlos Henrique	CA	IAC-18.C2.3.8
Melton, Robert G.	CA	IAC-18.A6.9.6
Melzer, Andre	A	IAC-18.A2.3.8
Mendoza, Omar	CA	IAC-18.D3.2.1
Mendoza, Omar	A	IAC-18.C3.3.6
Mendt, Stefan	CA	IAC-18.A1.2.10
Mendt, Stefan	CA	IAC-18.A1.2.24
Mendt, Stefan	CA	IAC-18.A1.4.4
Menenti, Massimo	CA	IAC-18.B4.4.7
Meng, Xianlong	CA	IAC-18.C3.1.10
Menges, Achim	CA	IAC-18.E5.1.8
Mengu, Cho	CA	IAC-18.B4.1.1
Mengu, Cho	CA	IAC-18.B4.1.13
Mengu, Cho	CA	IAC-18.B4.7.10
Menicucci, Alessandra	CA	IAC-18.E5.IP.3
Menon, Prathyush P	CA	IAC-18.D1.3.1
Menshenin, Yaroslav	A	IAC-18.D1.4A.8
Menting, Esmée	CA	IAC-18.D2.5.12
Menzies, Alexander	CA	IAC-18.C1.8.12
Menzio, Davide	A	IAC-18.C1.9.12
Merati, Giampiero	CA	IAC-18.A1.2.24
Merati, Giampiero	CA	IAC-18.A1.4.4
Mercado, Nancy	CA	IAC-18.A1.4.3
Mercado, Nancy	CA	IAC-18.E5.IP.10
Mercier, Gaétan	CA	IAC-18.A3.2A.3
Merkle, Dominik	CA	IAC-18.E2.3-GTS.4.9
Merkurev, Denis	CA	IAC-18.C4.4.11
Merrill, Raymond	CA	IAC-18.A3.1.3
Meß, Jan-Gerd	A	IAC-18.D1.1.1
Messerschmid, Ernst	A	IAC-18.B2.4.9
Messina, Maria	CA	IAC-18.E3.IP.1
Messina, Maria	CA	IAC-18.E5.5.3
Messina, Piero	A	IAC-18.A3.1.5
Messina, Piero	CA	IAC-18.E4.1.5
Messina, Piero	CA	IAC-18.A5.1.8
Messina, Piero	CA	IAC-18.E6.IP.1
Messina, Piero	A	IAC-18.E4.3B.9
Messmann, David	CA	IAC-18.B2.2.2
Mestreau-Garreau, Agnes	CA	IAC-18.D1.2.1
Mestrovic, Nicole	CA	IAC-18.E1.4.7
Mestry, Samiksha	CA	IAC-18.A3.2A.7
Mestry, Samiksha	CA	IAC-18.B4.8.5
Meta, Paolo	CA	IAC-18.D1.3.3
Metcalfe, Laurie	A	IAC-18.B3.6-A5.3.3
Metelli, Giulio	CA	IAC-18.A1.6.9
Metris, Gilles	CA	IAC-18.A2.1.1
Metzger, Stefan	CA	IAC-18.C2.6.3
Metzger, Stefan	A	IAC-18.D5.3.2
Meurisse, Alexandre	CA	IAC-18.E5.1.6
Meurisse, Alexandre	CA	IAC-18.A3.2C.3
Meusburger, Herwig	CA	IAC-18.A1.4.18
Meyer, Anne	CA	IAC-18.D3.2.4
Meyer, Anne	CA	IAC-18.A1.7.7
Meyer, Anne	CA	IAC-18.A2.7.12
Meyer, Anne	CA	IAC-18.C2.9.12
Meyer, Anne	CA	IAC-18.D4.5.10
Meyer, Antoine	CA	IAC-18.A2.4.8
Meyer, Florian	A	IAC-18.A2.2.7
Meyer, Florian	CA	IAC-18.D5.3.10
Meyer, Jan-Christian	CA	IAC-18.A6.4.4
Meyer, Jan-Christian	CA	IAC-18.A6.6.2
Meyer, Marit	CA	IAC-18.A2.7.13
Meyer, Sebastian	CA	IAC-18.A6.5.3
Meyer, Sebastian	CA	IAC-18.C3.4.3
Meyer, Thomas	CA	IAC-18.E6.1.4
MIAO, Jianyin	CA	IAC-18.A2.2.10
Miau, Jiun-Jih	CA	IAC-18.E3.1.14
Michalec, Romain	CA	IAC-18.D1.2.7
Michaud, Gabriele	CA	IAC-18.B2.2.3
Michel, Lefebvre	CA	IAC-18.C4.IP.17
Michel, Patrick	A	IAC-18.A3.4A.6
Michel, René	CA	IAC-18.B2.3.8
Michels, Jennifer	A	IAC-18.A2.5.11
Michlitsch, Jeffrey	A	IAC-18.D2.IP.3
Mickens, Matthew	CA	IAC-18.A1.7.16
Migeotte, Pierre-François	CA	IAC-18.A1.2.5
Migeotte, Pierre-François	CA	IAC-18.A1.2.22
Miguel González Pérez, José	CA	IAC-18.E1.8.5
Miguel-Lago, Mónica	CA	IAC-18.B1.IP.10
Mihara, Shoichiro	A	IAC-18.C3.2.8
Mihm, Moritz	A	IAC-18.A2.1.8
Mihm, Moritz	CA	IAC-18.D3.1.8
Mikhalchenko, Elena	A	IAC-18.A2.IP.1
Miki, Takahiro	CA	IAC-18.A3.IP.23
Mikschl, Tobias	CA	IAC-18.A3.4B.6
Mikulz, Eugen	CA	IAC-18.C2.1.7
Mikulz, Eugen	CA	IAC-18.A3.4B.6
Milankovich, Dorottya	A	IAC-18.E1.6.6
Milankovich, Dorottya	CA	IAC-18.B3.9-GTS.2.10
Milanov, Aleksandar	A	IAC-18.A4.IP.9
Milaševičius, Martynas	CA	IAC-18.B2.7.7
Milhano, Tiago	CA	IAC-18.A6.6.10
Milke, Alexander	CA	IAC-18.C2.7.1
Millard, Douglas	A	IAC-18.E1.6.7
Miller, Anatoli	A	IAC-18.A6.3.8
Milligan, Tony	CA	IAC-18.E3.2.7
Millinger, Mark	CA	IAC-18.A6.3.8
Millwood, Scott	A	IAC-18.D5.4.3
Milova, Praskovia	CA	IAC-18.E1.6.3
Milova, Praskovia	CA	IAC-18.C4.IP.17
Milstein, Oren	CA	IAC-18.A1.5.10
Milza, Fabiana	CA	IAC-18.B3.9-GTS.2.10
Milza, Fabiana	CA	IAC-18.E5.5.3
Mimasu, Yuya	CA	IAC-18.C1.6.8
Min, Xiangjun	CA	IAC-18.B5.3.10
Min, Yuan	CA	IAC-18.A1.8.10
Mindarno, Hery Steven	A	IAC-18.C2.IP.25
Mindermann, Pascal	A	IAC-18.C2.9.1
Minetti, Cristophe	CA	IAC-18.C2.8.5
Mingireanu, Florin	A	IAC-18.D2.IP.14
Minguijon Pallas, Pablo	A	IAC-18.A6.4.7
Minster, Gedi	A	IAC-18.B3.7.12
Mintus, Agata	CA	IAC-18.A5.1.6
Minute, Marco	CA	IAC-18.C4.8-B4.5A.2
Minutillo, Antonio	CA	IAC-18.D3.IP.7
Minville, Maxime	CA	IAC-18.A3.2A.3
Miquel Parra, Laura	CA	IAC-18.A5.1.5
Miquel Parra, Laura	A	IAC-18.E3.IP.13
Miranda, Cristina	CA	IAC-18.E7.7-B3.8.3
Mireault-Lecourt, Chloe	A	IAC-18.E1.IP.23
Mirino, Melissa	A	IAC-18.A3.IP.51
Mirji, Shreyas	CA	IAC-18.A6.4.9
Mirmina, Steven	A	IAC-18.E1.IP.10
Mischke, Robert	CA	IAC-18.D1.4B.8
Misev, Dimitar	CA	IAC-18.B1.4.4
Misev, Dimitar	CA	IAC-18.B4.7.1
Mishra, Aditya	CA	IAC-18.D3.2.9
Mishra, Aditya	A	IAC-18.A4.IP.7
Mishra, Aditya	A	IAC-18.D3.IP.5
Mishra, Aditya	CA	IAC-18.C3.4.8
Mishra, Aditya	CA	IAC-18.D4.5.12
Mishra, Smriti	CA	IAC-18.E2.4.7
Miskovic, Vanja	CA	IAC-18.C2.8.5
Misra, Arun	CA	IAC-18.C1.2.2
Misra, Arun	CA	IAC-18.C1.2.12
Misra, Tapan	CA	IAC-18.B1.3.9
Misuri, Tommaso	A	IAC-18.C4.4.10
Mitch, Ryan	CA	IAC-18.A3.4B.8
Mitchell, Ken	A	IAC-18.E2.2.8
Mitlyng, David	CA	IAC-18.D5.4.4
Mitra, Abhijit	CA	IAC-18.B2.1.10
Miura, Yoshiyuki	CA	IAC-18.C4.IP.31
Miyata, Kikuko	A	IAC-18.B4.2.4
Miyazaki, Yasuyuki	CA	IAC-18.C2.2.2
Mladenov, Tom	CA	IAC-18.C2.8.3
Moccia, Antonio	CA	IAC-18.B4.7.11
Mocerino, Armando	CA	IAC-18.D3.IP.7
Modenini, Dario	A	IAC-18.B4.8.12
Moeller, Ralf	A	IAC-18.A1.3.18
Moeller, Ralf	CA	IAC-18.A1.6.12
Moeller, Ralf	CA	IAC-18.A2.7.15
Mogilevsky, Mikhail	CA	IAC-18.B4.7.6
Mohamad Rahim, Siti Nadhirah	CA	IAC-18.B5.1.10
Mohamed, Hameed	CA	IAC-18.E1.IP.29
Mohammad, Mirkhalaf	CA	IAC-18.C2.4.3
Mohammed, Nebiyu	A	IAC-18.E1.IP.31
Mohanty, Susmita	CA	IAC-18.E1.9.14
Mohr, Daniel P.	CA	IAC-18.A2.6.3
Mohr, Markus	CA	IAC-18.A2.6.13
Mok, Sung-Hoon	CA	IAC-18.C1.IP.18
Mokaeva, Alisa	CA	IAC-18.E1.2.9
Moldwin, Mark	CA	IAC-18.B4.2.9
MOLINA, Marco	A	IAC-18.A3.3B.1
MOLINA, Marco	A	IAC-18.A3.5.4
MOLINA, Marco	A	IAC-18.C3.4.4
MOLINA, Marco	A	IAC-18.C2.8.5
Molina, Maria	A	IAC-18.B1.5.5
Molinari, Giulio	CA	IAC-18.D2.7.8
Molinari, Giulio	CA	IAC-18.B4.5.12
Molotkov, Vladimir	CA	IAC-18.A2.6.3
Molotov, Igor	CA	IAC-18.A6.IP.1
Molotov, Igor	A	IAC-18.A6.IP.8
Molotov, Igor	CA	IAC-18.A6.7.5
Momose, Kazuhiko	CA	IAC-18.E1.8.3
Momozawa, Ai	CA	IAC-18.C2.4.5
Monaco, Federico	CA	IAC-18.A3.IP.69
Monakhova, Uliana	CA	IAC-18.B4.7.6
Monari, Jader	CA	IAC-18.A4.1.5
Monchaux, David	A	IAC-18.D2.5.3
Monchieri, Emanuele	CA	IAC-18.A3.2B.8
Mondal, Amit	CA	IAC-18.A1.IP.20
Mondal, Amit	CA	IAC-18.A3.IP.67
Monette, Maxime	CA	IAC-18.C4.7-C3.5.5
Monge, Luis	CA	IAC-18.B4.1.4
Monge, Luis	CA	IAC-18.B1.5.5
Monge, Luis	A	IAC-18.E1.1.3
Mongrard, Olivier	CA	IAC-18.A3.2A.3
Monien, Georg	CA	IAC-18.B3.1.2
Monnat, Andreea	CA	IAC-18.E1.5.8
Monowar, Maisun Ibn	CA	IAC-18.E1.5.13
Monserrat-Filho, José	A	IAC-18.E7.4.13
Monsky, Anneke	CA	IAC-18.C2.3.10
Monsky, Anneke	A	IAC-18.A7.3.5
Montalbano, Joel	CA	IAC-18.A5.1.2
Montalti, Maurizio	CA	IAC-18.E5.1.7
Montebugnoli, Stelio	CA	IAC-18.A4.1.5
Montebugnoli, Stelio	CA	IAC-18.A4.1.9
Montebugnoli, Stelio	CA	IAC-18.A4.1.11
Monteiro, Jorge	CA	IAC-18.E2.3-GTS.4.9
Montenegro, Sergio	CA	IAC-18.E1.IP.34
Montenegro, Sergio	CA	IAC-18.A3.4B.6
Montero, Dominique	CA	IAC-18.C1.IP.25
Montero Montoya, Raquel Thamara	CA	IAC-18.B4.4.5
Monti Guarnieri, Andrea	CA	IAC-18.B1.2.12
Mony, Abhilash	A	IAC-18.C1.4.12
Monzon, Amalio	A	IAC-18.E1.5.1
Mooij, Erwin	CA	IAC-18.C1.5.9
Moore III, William E	CA	IAC-18.B3.4-B6.4.6
Mora, Jose	CA	IAC-18.A1.3.16
Mora, Jose	CA	IAC-18.A1.IP.40
Mora Portela, Darío	CA	IAC-18.D1.IP.27
Mora Vargas, Andres	A	IAC-18.B3.6-A5.3.1
Moraguez, Matthew	A	IAC-18.D1.2.11
Morand, Vincent	CA	IAC-18.E2.2.12
Morandi, Vittorio	CA	IAC-18.C2.8.5
Moranta, Sebastien	A	IAC-18.E3.2.3
Moranta, Sebastien	CA	IAC-18.E3.4.7
Moranta, Sebastien	CA	IAC-18.E3.4.10
Moranta, Sebastien	A	IAC-18.E6.2.3
Moratto, Claudio	CA	IAC-18.A2.1.4
Moreels, Marjan	CA	IAC-18.A1.8.8
Moreels, Philippe	CA	IAC-18.B1.IP.35
Moreira, Alberto	A	IAC-18.B1.2.4
Moreira, Luis	CA	IAC-18.C2.2.9
Morel de Westgaver, Eric	A	IAC-18.E3.3.11
Moreno Aguirre, Carolina	A	IAC-18.B3.9-GTS.2.1
Moreno Aguirre, Carolina	A	IAC-18.A2.7.3
Moretti, Nicholas	CA	IAC-18.B4.2.5
Morfill, Gary	CA	IAC-18.D1.4B.7
Mori, Osamu	CA	IAC-18.C1.6.8
Moriani, Marco	CA	IAC-18.D1.3.6
MORIOKA, Sumio	CA	IAC-18.D2.7.9
Morito, Toshiki	CA	IAC-18.A3.1.10
Moritz, Juliane	CA	IAC-18.C4.IP.48
Morlang, Frank	A	IAC-18.B5.1.3
Morlang, Frank	CA	IAC-18.B2.5.4
Morlang, Frank	CA	IAC-18.D6.3.3
Morlang, Frank	CA	IAC-18.D6.3.9
Morozov, Kirill	CA	IAC-18.E1.IP.20
Morrison, Charlotte	CA	IAC-18.A5.1.5

Morrison, Charlotte	CA	IAC-18.E3.IP.13
Morrison, Charlotte	CA	IAC-18.D2.8-A5.4.6
Morsbøl, Jonas	CA	IAC-18.B4.2.2
Morsbøl, Jonas	CA	IAC-18.C4.6.4
Mortari, Daniele	CA	IAC-18.C1.8.3
Moruzzi, Michael	CA	IAC-18.C4.5.10
Moruzzi, Michael	CA	IAC-18.C4.IP.38
Morzhukhina, Alena V.	A	IAC-18.C2.8.6
Moseley, Samuel Harvey	CA	IAC-18.A7.3.8
Moser, Hubert Anton	A	IAC-18.D1.5.5
Moses, Kelly	CA	IAC-18.D5.2.9
Mosier, Gary	CA	IAC-18.D1.IP.25
Moskalov, Sergii	A	IAC-18.D2.4.2
Moskovitz, Nicholas	CA	IAC-18.A6.10-C1.7.1
Mostafa, Abdelfattah	A	IAC-18.C4.IP.48
Mostert, Sias	A	IAC-18.B4.1.6
Mostert, Sias	A	IAC-18.B5.3.12
Motohara, Moritoshi	CA	IAC-18.B3.3.6
Motzigemba, Matthias	A	IAC-18.B1.3.8
Motzigemba, Matthias	CA	IAC-18.B2.7.1
Moukhamedieva, Lana	CA	IAC-18.A1.3.20
Moukhamedieva, Lana	CA	IAC-18.B3.3.9
Moukhamedieva, Lana	CA	IAC-18.A1.6.11
Moukhamedieva, Lana	CA	IAC-18.A1.7.8
Mould, Toby	CA	IAC-18.D4.5.18
MOUSSET, Valérie	CA	IAC-18.B3.6-A5.3.3
Moussi-Soffys, Aurelie	CA	IAC-18.A3.4A.2
Mozo, Alvaro	CA	IAC-18.B2.1.12
Mu, Junxu	CA	IAC-18.A4.1.8
Mu, Ruinan	A	IAC-18.C2.3.12
Much, Rudolf	CA	IAC-18.A2.1.4
Mudkey, Nishanth	A	IAC-18.D4.1.17
Mueller, Florian	CA	IAC-18.E5.IP.5
Mueller, Robert	A	IAC-18.E5.1.5
Mueller, Thomas	CA	IAC-18.B3.4-B6.4.2
Mugellesi-Dow, Roberta	CA	IAC-18.D5.2.4
Mughal, M.Rizwan	CA	IAC-18.C3.IP.11
Mugnuolo, Raffaele	CA	IAC-18.A3.5.4
Muirhead, Brian	CA	IAC-18.A3.3A.7
Mukadam, Mouzzam Mehmood	CA	IAC-18.B3.9-GTS.2.11
Mukadam, Mouzzam Mehmood	CA	IAC-18.A3.IP.69
Mukai, Chiaki	CA	IAC-18.E1.3.2
Mukai, Chiaki	CA	IAC-18.D1.3.10
Mukherjee, Bhaskar	A	IAC-18.A1.5.1
Mukherjee, Bhaskar	A	IAC-18.C2.6.8
Mukherjee, Rudranarayan	CA	IAC-18.D1.4B.1
Mulder, Edwin	CA	IAC-18.A1.2.22
Mulder, Edwin	CA	IAC-18.A1.4.8
Mulder, Edwin	CA	IAC-18.A1.IP.3
Mullin, Nikolay	A	IAC-18.E1.4.3
Mullin, Nikolay	A	IAC-18.E1.IP.20
Mullins, Irina	CA	IAC-18.E1.8.3
Mungiguerra, Stefano	A	IAC-18.C2.4.4
Mungiguerra, Stefano	CA	IAC-18.C4.3.6
Muolo, Luigi	CA	IAC-18.B2.8-GTS.3.1
Muolo, Luigi	CA	IAC-18.A6.IP.41
Muolo, Luigi	CA	IAC-18.A6.7.7
Murage, Sophia	CA	IAC-18.B4.1.8
Murakami, Daichi	A	IAC-18.D4.3.11
Murata, Naofumi	CA	IAC-18.D1.5.6
Murdaca, Francesco	CA	IAC-18.D5.2.5
Murdza, James	CA	IAC-18.B2.8-GTS.3.12
Murgia, Matteo	CA	IAC-18.A4.1.9
Murillo Alcocer, Marco Alejandro	A	IAC-18.B2.2.11
Murnane, Austin	A	IAC-18.D4.5.16
Murphy, David	A	IAC-18.B4.9-GTS.5.7
Murrow, David	CA	IAC-18.A1.5.10
Murtazin, Rafail	CA	IAC-18.A5.1.11
Murthi, K.R. Sridhara	CA	IAC-18.B5.2.3
Murthi K. R., Sridhara	CA	IAC-18.B5.3.7
Murthy, Srinivas	CA	IAC-18.C3.4.12
Muru, Silvar	CA	IAC-18.B1.3.6
Musetti, Bruno	A	IAC-18.A3.3A.3
Musetti, Bruno	CA	IAC-18.A3.3A.10
Musiolik, Grzegorz	A	IAC-18.A2.7.8
Musson, David	CA	IAC-18.A1.3.5
Muszyński-Huhajło, Mateusz	CA	IAC-18.A1.7.13
Mutabazi, Innocent	CA	IAC-18.A2.4.8
Mutschke, Gerd	CA	IAC-18.A2.4.12
Muñoz Elorza, Iñigo	CA	IAC-18.B3.5.6
Mwangi, Charles	CA	IAC-18.B4.1.8
Mykhalchyshyn, Roman	A	IAC-18.D2.3.12
Myrrhe, Jacqueline	A	IAC-18.D4.2.5
Mysore, Aprameya	CA	IAC-18.C1.8.12
Márton, Zoltán-Csaba	CA	IAC-18.D1.2.7
Möstl, Stefan	CA	IAC-18.A1.2.2
Mücke, Martin	A	IAC-18.B1.2.8
Mücklich, Frank	CA	IAC-18.A1.3.18
Mücklich, Frank	CA	IAC-18.A2.7.15
Müller, Armin	CA	IAC-18.D1.4B.3
Müller, Christina	CA	IAC-18.E1.2.1
Müller, Daniel	CA	IAC-18.A1.3.18
Müller, Marcus	CA	IAC-18.A3.2A.8
Müller, Moritz	CA	IAC-18.B4.7.12
Müller, Thomas	CA	IAC-18.A7.3.7
Müntinga, Hauke	A	IAC-18.A2.1.14
Müntinga, Hauke	CA	IAC-18.A2.5.6

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Name	Role	Paper
Na, Yunju	A	IAC-18.C1.IP.18
Nadalini, Riccardo	CA	IAC-18.A3.2C.4
Nader, Jules	CA	IAC-18.B2.6.4
Nader, Ronnie	CA	IAC-18.B2.6.4
Naderi, Julian	CA	IAC-18.A1.4.16
Naef, Samuel	CA	IAC-18.B2.3.8
Naef, Samuel	A	IAC-18.E5.4.9
Naef, Samuel	CA	IAC-18.B2.6.3
NAG, RAHUL	CA	IAC-18.B4.7.5
Nagano, Kenji	CA	IAC-18.C3.2.8
Nagase, Tetsuya	CA	IAC-18.C1.IP.9
Nagase, Tomoka	CA	IAC-18.B3.1.5
Nagashima, Satoshi	A	IAC-18.C1.6.5
Nagata, Takuma	A	IAC-18.A6.IP.30
Nagaty, Amr	CA	IAC-18.A3.2A.3
Nagendra, Narayan Prasad	CA	IAC-18.E6.1.9
Nagendra, Narayan Prasad	A	IAC-18.E7.1.2
Nagendra, Narayan Prasad	CA	IAC-18.B5.2.11
Nagendra, Narayan Prasad	CA	IAC-18.D1.IP.31
Nagy, Viktor	CA	IAC-18.A6.IP.6
NAIK, JARPULA DHARMA	CA	IAC-18.C4.3.13
Naik, Kunal	CA	IAC-18.B2.3.8
Naik, Kunal	A	IAC-18.A3.IP.39
Naik, Kunal	CA	IAC-18.B2.6.3
Naik, Siddhesh	CA	IAC-18.D4.2.8
Naik, Siddhesh	CA	IAC-18.B1.IP.25
Nair, Kiran	A	IAC-18.E3.4.3
Nair, Kiran	A	IAC-18.A6.8.3
Nair, Sarath Chandran	CA	IAC-18.C4.IP.24
Najjar, Michael	A	IAC-18.E5.3.1
Nakagami, Hidetoshi	CA	IAC-18.A2.7.7
Nakahata, Akihiro	CA	IAC-18.A1.2.17
NAKAJIMA, Shintaro	CA	IAC-18.C2.2.1
Nakamura, Airi	CA	IAC-18.A2.2.3
Nakamura, Airi	CA	IAC-18.A2.4.11
Nakamura, Shuji	CA	IAC-18.C3.2.8
Nakamura, Takahiro	CA	IAC-18.D2.7.2
Nakamura, Takeru	CA	IAC-18.C2.2.2
Nakamura, Toshiki	A	IAC-18.B5.1.12
Nakamura, Yasuhiro	CA	IAC-18.A2.7.7
Nakarada Pecujlic, Anja	A	IAC-18.E7.3.5
Nakarada Pecujlic, Anja	A	IAC-18.E1.IP.9
Nakata, Kazuya	CA	IAC-18.D1.3.10
Nakka, Yashwanth Kumar	CA	IAC-18.C1.6.3
Naldi, Giovanni	CA	IAC-18.A6.1.9
Naldi, Giovanni	CA	IAC-18.A6.IP.10
Nambiar, Shrrirup	CA	IAC-18.A3.IP.7
Nampoothiri, Krishnan	CA	IAC-18.C2.IP.23
Nandi, Payal	A	IAC-18.B4.8.6
Nandyala, Varun	CA	IAC-18.C4.5.3
Nanni, Francesca	CA	IAC-18.C2.8.7
Nanni, Francesca	CA	IAC-18.C2.9.11
Napier, Jennifer Lauren	A	IAC-18.E5.5.1
Napier, Jennifer Lauren	A	IAC-18.E4.3B.8
Napolitano, Ermanno	A	IAC-18.D4.5.13
Nara, Tokio	CA	IAC-18.D2.2.1
Narayan, Vinay	CA	IAC-18.E3.IP.14
Nardi, Luca	CA	IAC-18.A1.6.9
Naser, Angeera	CA	IAC-18.D4.1.1
Naseri, Asal	CA	IAC-18.A7.3.9
Nassef, Mohamed Zakaria	A	IAC-18.A1.IP.26
Nassef, Mohamed Zakaria	CA	IAC-18.A1.8.9
Nasser, Mona	A	IAC-18.A1.3.7
Nasseri, Seyed Ali	A	IAC-18.B3.9-GTS.2.14
Nasseri, Seyed Ali	A	IAC-18.E1.2.7
Nassisi, Annamaria	A	IAC-18.E3.IP.1
Nassisi, Annamaria	CA	IAC-18.E5.5.3
Natale, Pasquale	CA	IAC-18.C4.5.7
Naumann, Karl Wieland	A	IAC-18.C4.IP.26
Naumkin, Vadim N.	CA	IAC-18.A2.6.3
Nautiyal, Anirudh	CA	IAC-18.C2.IP.21
Navarrini, Alessandro	CA	IAC-18.A4.1.9
Navarrini, Alessandro	CA	IAC-18.A4.1.11
Navarro-Tapia, Diego	A	IAC-18.C1.5.3
Nayar, Madhavi	CA	IAC-18.E1.8.3
Nazarious, Miracle Israel	A	IAC-18.A3.3B.8
Nazri, Hannah	A	IAC-18.A2.7.10
Nechita, Silvia	CA	IAC-18.A3.IP.54
Neduncheran, Adhithiyan	CA	IAC-18.B3.IP.14
Nedyalkov-Höfkes, Danail	A	IAC-18.C4.1.10
Neelam, Srujana	CA	IAC-18.A1.8.12
Neglia, Cosimo	CA	IAC-18.A1.3.10
Negoda, Sergiy	CA	IAC-18.E3.1.3
Negri, Barbara	CA	IAC-18.B4.2.11
Nehls, Mary	CA	IAC-18.C2.6.2
Neiberlien, Henry	CA	IAC-18.E1.3.10
Neidlinger, Kristin	A	IAC-18.B3.IP.2
Nemo, Grégoire	CA	IAC-18.B2.3.8
Nenarokomov, Aleksey V.	CA	IAC-18.C2.4.10
Nenarokomov, Aleksey V.	A	IAC-18.C2.7.4
Nenarokomov, Aleksey V.	CA	IAC-18.C2.8.6
Neralkar, Aditya	A	IAC-18.E2.4.10
Nergaard, Kim	CA	IAC-18.A3.1.10
Nergaard, Kim	CA	IAC-18.B3.6-A5.3.3
Neri, Gianluca	CA	IAC-18.E1.3.6
Neri, Gianluca	A	IAC-18.A1.6.5
Nerovny, Nikolay	CA	IAC-18.E2.4.8
Nesladek, Milos	CA	IAC-18.C2.8.3
Nesnas, Issa A.	CA	IAC-18.C1.6.11
Nesnas, Issa A.	CA	IAC-18.A3.4B.5
Nessel, James	CA	IAC-18.B2.1.5
Netelev, Andrey V.	CA	IAC-18.C2.8.6
Neuckel, Daniel Stefan	CA	IAC-18.B3.9-GTS.2.3
Neumann, Antje	A	IAC-18.A2.IP.12
Neumann, Nils	A	IAC-18.C1.IP.33
Neumann, Patrick	CA	IAC-18.E7.2.9
Neumann, Stephan	CA	IAC-18.D5.1.11
Neunzig, Oliver	A	IAC-18.E2.2.11
Neustroev, Valeriy	CA	IAC-18.D5.1.1
Neuzner, Andreas	CA	IAC-18.B3.3.12
Neves, Rita	A	IAC-18.C1.1.4
Neves, Rita	CA	IAC-18.E2.3-GTS.4.11
Neves, Rita	A	IAC-18.C1.8.8
Neveu, David	CA	IAC-18.A3.2A.3
Newman, Christopher	A	IAC-18.E7.2.10
Newman, Josh	CA	IAC-18.A3.2B.6
Newman, Timothy	CA	IAC-18.B1.2.10
Newman, Timothy	CA	IAC-18.B1.4.5
Newton, Elizabeth	CA	IAC-18.B1.5.6
Newton, Elizabeth	CA	IAC-18.B1.5.10
Newton, Elizabeth	CA	IAC-18.B1.IP.28
Newton, Elizabeth	CA	IAC-18.C4.6.8
Newton, Elizabeth	CA	IAC-18.C4.7-C3.5.3
Newton, Elizabeth	CA	IAC-18.C4.7-C3.5.10
Newton, Elizabeth	CA	IAC-18.D2.8-A5.4.4
Newton, Elizabeth	CA	IAC-18.D2.8-A5.4.5
Newton, Elizabeth	CA	IAC-18.E3.6.11
Newton, Elizabeth	CA	IAC-18.A2.7.13
Newton, Elizabeth	CA	IAC-18.E7.7-B3.8.2
Ng, Alfred	CA	IAC-18.C1.2.2
Ng, Hui Yi Rebecca	CA	IAC-18.B6.IP.2
Ngamarunchot, Bank	CA	IAC-18.E1.2.8
Ni, Zhiyu	CA	IAC-18.C3.1.8
Niccolai, Lorenzo	A	IAC-18.C4.6.13
Nicholas, Austin	CA	IAC-18.A3.3A.6
Nicholson, Wayne	CA	IAC-18.A1.6.3
Nicolls, Michael	CA	IAC-18.A6.7.4
Niculut, Laurentio	CA	IAC-18.C2.IP.5
Nie, Mingyan	A	IAC-18.E7.2.11
Niedermaier, Thomas	CA	IAC-18.A2.1.4
Niederstrasser, Carlos	A	IAC-18.D2.9-D6.2.9
Niederwieser, Tobias	A	IAC-18.A1.7.9
Nielsen, Jens	CA	IAC-18.B4.6B.11
Nieminen, Petteri	CA	IAC-18.A1.5.2
Nigol, Madis Kaspar	CA	IAC-18.B1.3.6
Niimura, Yuki	A	IAC-18.A2.4.10
Niitsu, Mayuki	CA	IAC-18.D2.2.1
Nijs, Siegfried	CA	IAC-18.E1.6.3
Nikam, Omkar	CA	IAC-18.E5.4.9
Nikitin, Valeriy	CA	IAC-18.A2.4.2
Nikitin, Valeriy	CA	IAC-18.A2.IP.1
Nikitin, Valeriy	CA	IAC-18.A2.IP.11
Nikolaev, Evgeny	CA	IAC-18.A3.IP.4
Nikolasevic, Goran	A	IAC-18.E5.5.4
Nikonov, Vasily	CA	IAC-18.A3.IP.50
Nikonov, Vasily	CA	IAC-18.D4.IP.3
Ninagawa, Ryotaro	CA	IAC-18.B4.7.10
Ning, Xin	CA	IAC-18.D1.IP.19
Nisar, Zeena	A	IAC-18.A2.7.14
Nishi, Kentaro	A	IAC-18.D1.1.4
Nishida, Hiroyuki	CA	IAC-18.C4.7-C3.5.11
Nishihara, Jun	CA	IAC-18.C3.2.8
Nishii, Naoki	CA	IAC-18.C2.5.2
Nishikawa, Waka	CA	IAC-18.B3.3.6
Nishimura, Naoki	CA	IAC-18.A1.2.16
Nishimura, Naoki	CA	IAC-18.A1.3.2
Nishiyama, Kazutaka	A	IAC-18.C4.4.3
Nistico', Enrico Andrea	CA	IAC-18.A3.3A.10
Nitsche, Andrea	CA	IAC-18.A1.IP.3
Nitschke, Felix	CA	IAC-18.D4.5.3
Nitzer, Robin	CA	IAC-18.A1.3.20
Nitzer, Robin	CA	IAC-18.A2.IP.5
Nitzer, Robin	CA	IAC-18.A1.7.8
NIU, Aimin	A	IAC-18.B3.3.2
Niño Prieto, Omar Ariosto	A	IAC-18.D5.1.10
Nkansah, Kwasi	CA	IAC-18.B2.3.8
Nkansah, Kwasi	CA	IAC-18.B2.6.3
Nodar, Diego	CA	IAC-18.B4.2.10
Noeker, Matthias	A	IAC-18.B3.7.13
Noga, Tomasz	CA	IAC-18.A6.5.9
Noga, Tomasz	CA	IAC-18.D2.9-D6.2.11
Noguchi, Yuichi	CA	IAC-18.D2.1.8
Nogueira, Tiago	CA	IAC-18.B4.3.12
Nogueira de Faria, William	CA	IAC-18.D1.IP.12
Nohara, Masaru	CA	IAC-18.B4.5.2
Nohka, Falk	CA	IAC-18.D1.4B.7
Nokes, Charles	CA	IAC-18.E1.IP.1
Nolbert, Dominik	CA	IAC-18.A1.5.2
Nonaka, Satoshi	A	IAC-18.D2.5.7
Noomen, Ron	CA	IAC-18.A3.2A.7
Noomen, Ron	CA	IAC-18.A6.4.7
Noomen, Ron	CA	IAC-18.D1.IP.31
Noomen, Ron	CA	IAC-18.B4.8.5
Noor, Maliyat	CA	IAC-18.D1.1.6
Noppe, Alexandra	CA	IAC-18.A1.8.4
Nordine, Michael	A	IAC-18.A1.IP.21
Nordine, Michael	CA	IAC-18.A1.7.1
Nordmann, Stefan	CA	IAC-18.A7.IP.2
Nordmann, Stefan	CA	IAC-18.D5.3.1

Norheim, Johannes	CA	IAC-18.B3.9-GTS.2.1
Norheim, Johannes	A	IAC-18.D3.4.2
Norman, Robert	CA	IAC-18.A6.9.1
Noroozian, Omid	CA	IAC-18.A7.3.8
Norp, Toon	A	IAC-18.B2.3.1
Norton, Charles	A	IAC-18.B4.2.1
Nosovsky, Andrey	CA	IAC-18.A1.IP.12
Notea, Amir	CA	IAC-18.A3.IP.69
Novak, Daniel	A	IAC-18.B6.2.3
Novara, Carlo	A	IAC-18.C1.6.4
Novara, Carlo	CA	IAC-18.C1.IP.26
Novikov, Valery	CA	IAC-18.A1.4.14
Novikov, Valery	CA	IAC-18.A1.IP.12
Novikov, Valery	CA	IAC-18.A1.IP.13
Novikov, Valery	A	IAC-18.A1.IP.18
Novikova, Natalia	CA	IAC-18.A2.IP.5
Novikova, Natalia	CA	IAC-18.A1.7.8
Nowakowski, Pawel	A	IAC-18.A6.5.9
Ntakakis, George	CA	IAC-18.A1.3.11
Ntinos, Christos	CA	IAC-18.B2.3.8
Ntinos, Christos	CA	IAC-18.E5.4.9
Ntinos, Christos	CA	IAC-18.B2.6.3
Nuermberger, Maximilian	CA	IAC-18.A2.IP.10
Nuevo, Miguel	CA	IAC-18.B5.2.6
Nugent, Ryan	CA	IAC-18.B4.5.14
Nugraha, Ridha Aditya	A	IAC-18.E7.IP.22
Nwachukwu, Anthony	A	IAC-18.B5.2.8
Nwachukwu, Anthony	A	IAC-18.E1.7.8
Nyberg, Erik	CA	IAC-18.A2.3.7
Nüchter, Andreas	CA	IAC-18.E1.IP.34

O

Name	Role	Paper
O'Brien, Dennis	A	IAC-18.E7.4.5
O'Connor, William	A	IAC-18.C1.IP.1
O'Keeffe, Patrick	A	IAC-18.E3.6.12
O'Neill, William	CA	IAC-18.D1.4A.6
O'Neill, William	A	IAC-18.D1.4B.10
O'Reilly, Dillon	CA	IAC-18.D3.1.3
O'Reilly, Dillon	CA	IAC-18.E1.4.2
O'Reilly, Dillon	CA	IAC-18.A5.1.10
Oberst, Jürgen	CA	IAC-18.A3.3A.11
Obrist, Marianna	A	IAC-18.B3.9-GTS.2.13
Obukhov, Vladimir	CA	IAC-18.C4.4.11
Ochiai, Mika	A	IAC-18.D3.1.11
Ocón, Jorge	A	IAC-18.D1.6.12
Oda, Toshimitsu	CA	IAC-18.B3.9-GTS.2.3
Oddy, Tim M	CA	IAC-18.A1.5.2
Odeyemi, Olumide	A	IAC-18.B2.IP.15
Oesef, Kevin	CA	IAC-18.E2.3-GTS.4.12
Offermann, Lukas	CA	IAC-18.B3.9-GTS.2.3
Offiong, Etim	CA	IAC-18.E1.IP.12
Ogawa, Shiho	CA	IAC-18.B3.3.6
Ogawara, Akira	A	IAC-18.C4.3.3
Ogborne, Stuart	CA	IAC-18.E2.3-GTS.4.5
Ogrizovic, Vukan	CA	IAC-18.B2.3.3
Ogungbuyi, Michael Gbenga	A	IAC-18.E5.2.9
Ogut, Nihat Mert	A	IAC-18.E5.IP.3
Ohashi, Kaoru	CA	IAC-18.D1.2.4
Ohkawa, Yasushi	A	IAC-18.C4.IP.31
Ohkawa, Yasushi	CA	IAC-18.A6.6.5
Ohkubo, Shinya	CA	IAC-18.D2.2.1
Ohkuma, Hayato	CA	IAC-18.A2.7.7
Ohtaki, Yuh	CA	IAC-18.A1.1.6
Ohtsuka, Hirohito	CA	IAC-18.D2.7.2
Ohtsuka, Hirohito	A	IAC-18.B4.5.2
Oi, Yuichi	CA	IAC-18.A1.1.6
Oikawa, Takuto	A	IAC-18.D1.3.5
Oikawa, Takuto	CA	IAC-18.A3.2C.9
Oiko, Vitor	CA	IAC-18.B4.2.2
Oiko, Vitor	CA	IAC-18.C4.6.4
Ojeda Ramirez, Oscar Ivan	A	IAC-18.E1.3.5
Ojeda Ramirez, Oscar Ivan	A	IAC-18.E5.1.12
Ojeda Ramirez, Oscar Ivan	A	IAC-18.A1.IP.39
Ojha, Siddharth	A	IAC-18.A1.IP.20
Ojha, Siddharth	CA	IAC-18.A3.IP.67
Okada, Hideaki	A	IAC-18.C2.2.7
Okada, Kazuyuki	A	IAC-18.D1.5.6
Okada, Nobu	CA	IAC-18.A6.8.6
Okada, Tatsuaki	CA	IAC-18.A3.4A.2
Okamoto, Akira	CA	IAC-18.A6.8.6
Okamoto, Atsushi	CA	IAC-18.D1.1.4
Okamoto, Hiroyuki	CA	IAC-18.A6.6.5
Okita, Koichi	CA	IAC-18.C4.3.3
Okita, Koichi	CA	IAC-18.C4.IP.8
Okninski, Adam	CA	IAC-18.C4.3.12
Okninski, Adam	CA	IAC-18.A6.5.9
Okninski, Adam	CA	IAC-18.D2.9-D6.2.11
Okuda, Noriyuki	CA	IAC-18.A3.IP.29
Okumura, Teppei	CA	IAC-18.C4.IP.31
Okumura, Teppei	CA	IAC-18.A6.6.5
Okuyama, Kei-ichi	CA	IAC-18.A1.5.9
Olakunle, Oladosu	A	IAC-18.E1.IP.12
Oliva, Leonardo	A	IAC-18.D1.IP.21
Oliveira, João	CA	IAC-18.A3.3B.7
Oliveira, Justin	A	IAC-18.B2.8-GTS.3.1
Olivieri, Lorenzo	A	IAC-18.A6.3.7
Olivieri, Lorenzo	CA	IAC-18.A6.3.9
Olivieri, Lorenzo	CA	IAC-18.A6.IP.19
Olsakova, Michaela	CA	IAC-18.D1.1.6
Olsen, John	CA	IAC-18.D4.5.15
Olsen, Øystein	CA	IAC-18.B2.5.6
Olson, Thomas	A	IAC-18.E6.1.7
Olsson-Francis, Karen	CA	IAC-18.A1.6.12
Oltmann, Hergen	A	IAC-18.A2.3.6
Oltmann, Hergen	CA	IAC-18.A1.8.9
Oltrogge, Daniel	CA	IAC-18.A6.7.8
Oluwafemi, Funmilola Adebisi	A	IAC-18.A1.3.16
Oluwafemi, Funmilola Adebisi	CA	IAC-18.B3.9-GTS.2.5
OLUWAFEMI, Funmilola Adebisi	CA	IAC-18.E1.5.7
Oluwafemi, Funmilola Adebisi	A	IAC-18.A1.IP.40
Oluwafemi, Funmilola Adebisi	CA	IAC-18.A3.IP.48
Omar, Sanny	A	IAC-18.A6.5.4
Omiciuolo, Manolo	A	IAC-18.D1.IP.9
Onga, Tadaoki	CA	IAC-18.C4.3.3
Ono, Go	CA	IAC-18.C1.6.8
Ono, Wataru	CA	IAC-18.A2.7.7
Onofri, Silvano	CA	IAC-18.A1.6.12
Onuki, Misuzu	CA	IAC-18.E6.1.8
Onuki, Misuzu	A	IAC-18.E6.2.7
Oosaki, Hiroyuki	CA	IAC-18.C3.2.7
Oostenveld, Robert	CA	IAC-18.A4.IP.3
Oosterlinck, Rene	CA	IAC-18.A3.IP.13
Opatz, Oliver	CA	IAC-18.A1.2.10
Opatz, Oliver	CA	IAC-18.A1.2.24
Opatz, Oliver	CA	IAC-18.A1.4.7
Opatz, Oliver	CA	IAC-18.A1.IP.21
Opatz, Oliver	CA	IAC-18.A1.IP.22
Opatz, Oliver	A	IAC-18.A1.7.1
Opromolla, Roberto	A	IAC-18.C1.3.5
Opromolla, Roberto	CA	IAC-18.D1.3.3
Opromolla, Roberto	A	IAC-18.A6.5.8
Opromolla, Roberto	CA	IAC-18.B4.7.11
Orbach, Roy	CA	IAC-18.D5.IP.2
Ording, Barend	CA	IAC-18.B1.5.1
Oreshkin, Nikolai	CA	IAC-18.B5.1.5
Oribe, Kyoko	A	IAC-18.D2.1.8
Orlov, Oleg	CA	IAC-18.B3.2.5
Orlov, Oleg	CA	IAC-18.A1.3.3
Orlov, Oleg	CA	IAC-18.A1.3.9
Orlov, Oleg	A	IAC-18.A1.4.1
Orlov, Oleg	CA	IAC-18.A1.4.14
Orlov, Oleg	CA	IAC-18.A1.6.11
Orlov, Oleg	CA	IAC-18.A2.IP.5
Orlowski-Feldhusen, Fabian	CA	IAC-18.D1.4B.7
Ormö, Jens	CA	IAC-18.A3.2C.8
Ornelas, Isabel	CA	IAC-18.E3.1.13
Orosei, Roberto	CA	IAC-18.A3.IP.51
Orr, Nathan	CA	IAC-18.B4.4.1
Ortega, Guillermo	CA	IAC-18.A3.1.10
Ortega Flores, Brenda Vanessa	CA	IAC-18.E1.IP.26
Ortiz, Jose-Luis	CA	IAC-18.A7.3.7
Ortwein, Annette	CA	IAC-18.E1.2.1
Orzechowski, Leszek	A	IAC-18.A5.2.15
Orzechowski, Leszek	CA	IAC-18.A5.1.14
Osborne, Richard	CA	IAC-18.B4.5.6
Osetskiy, Nikolay	CA	IAC-18.A1.2.6
Oshio, Yuya	CA	IAC-18.C4.7-C3.5.11
Ossowski, Maciej	CA	IAC-18.C2.IP.6
Ossowski, Maciej	CA	IAC-18.A3.5.3
Osterloh, Tobias	A	IAC-18.D1.IP.6
Ostorero, Carlo	CA	IAC-18.A3.2A.11
Oswald, Markus	CA	IAC-18.A2.1.7
Oswald, Markus	CA	IAC-18.A2.1.9
Oswald, Michael	CA	IAC-18.A6.2.6
Othon, William	A	IAC-18.E5.1.13
Otieno, Vivian	CA	IAC-18.B4.1.8
Otsuka, Kiyotoshi	CA	IAC-18.D4.3.10
Otsuki, Masatsugu	CA	IAC-18.D1.2.4
Ott, Christian	CA	IAC-18.D1.6.10
Ott, Tobias	CA	IAC-18.E2.3-GTS.4.1
Ottersten, Björn	CA	IAC-18.E1.5.8
Otto, Marcel	A	IAC-18.C2.3.1
Ou, Dongbin	A	IAC-18.C2.7.12
Ouis, Mohammed Amine	CA	IAC-18.B4.3.5
Oumer, Nassir W.	CA	IAC-18.D1.2.7
Outlaw, Ron	CA	IAC-18.C4.6.4
Outlaw, Ronald	CA	IAC-18.B4.2.2
Ouxin, Lu	CA	IAC-18.B2.4.7
Ovchinnikov, Mikhail	A	IAC-18.C1.2.4
Ovchinnikov, Mikhail	A	IAC-18.C1.5.7
Ovchinnikov, Mikhail	A	IAC-18.B4.6B.3
Ovchinnikov, Mikhail	CA	IAC-18.C1.8.10
Ovchinnikov, Mikhail	CA	IAC-18.B4.7.6
Overath, Jan	CA	IAC-18.A1.7.17
Oving, Bertil	A	IAC-18.D2.7.6
Owen, Christopher J.	CA	IAC-18.A7.3.1
Ozawa, Satoru	CA	IAC-18.D1.1.4
Ozawa, Takashi	CA	IAC-18.C1.8.1
Ozawa, Yuichiro	CA	IAC-18.C3.2.8
Ozawa, Yusuke	CA	IAC-18.C1.9.10
Ozcan-Cakir, Canan Elif	CA	IAC-18.A1.IP.29
OZEROV, DMITRY	A	IAC-18.B3.3.9
Ozimek, Martin	CA	IAC-18.C1.9.7

P

Name	Role	Paper
P, ARUN KUMAR	A	IAC-18.C4.3.13
P, VINOD	A	IAC-18.C4.5.4
Paa, Wolfgang	CA	IAC-18.A2.2.7
Paccagnella, Alessandro	CA	IAC-18.A6.3.7
Pacheco Cabrera, Enrique	A	IAC-18.B2.4.5
Pacheco Cabrera, Enrique	A	IAC-18.B1.4.10
Padhi, R.	CA	IAC-18.C1.IP.16
Padula, Maria Piera	CA	IAC-18.A6.4.9
Pagan, Adam S.	CA	IAC-18.C2.4.8
Pagano, Antonio	CA	IAC-18.C1.5.10
Pai, Raymond	CA	IAC-18.B4.4.6
Pai, Srinivas	A	IAC-18.E2.4.12
Pain, Matthew	CA	IAC-18.A5.1.5
Paissoni, Christopher Andrea	CA	IAC-18.C4.6.6
Paissoni, Christopher Andrea	A	IAC-18.D2.8-A5.4.7
Pajovic, Marko	CA	IAC-18.E7.3.5
Pakhomova, Anna	CA	IAC-18.A1.6.11
Pakosz, Michal	CA	IAC-18.A6.5.9
Pakosz, Michal	CA	IAC-18.D2.9-D6.2.11
Palermo, Gianluca	CA	IAC-18.D1.IP.5
Palermo, Vincenzo	CA	IAC-18.C2.8.5
Palla, Chiara	CA	IAC-18.A1.5.2
Pallaschke, Siegmar	CA	IAC-18.D5.2.4
Pallichadath, Vidhya	A	IAC-18.C4.8-B4.5A.6
Palm, Christopher	CA	IAC-18.C1.3.7
Palmerini, Giovanni B.	CA	IAC-18.B2.1.11
Palmerini, Giovanni B.	CA	IAC-18.C1.4.11
Palmerini, Giovanni B.	CA	IAC-18.C1.IP.8
Palmetshofer, Patrick	CA	IAC-18.E2.3-GTS.4.9
Palmnäs, Ulf	CA	IAC-18.D2.2.5
Paloski, William	CA	IAC-18.A1.4.1
Palumbo, Pasquale	CA	IAC-18.A3.5.4
Palun, Adrien	CA	IAC-18.B1.1.6
Pambaguian, Laurent	CA	IAC-18.C4.IP.48
Pan, Hongliang	A	IAC-18.C4.9.3
Pan, Shunliang	CA	IAC-18.D5.1.7
Pandele, Constantin Alexandru	CA	IAC-18.C1.5.10
Pandhi, Twinkle	A	IAC-18.C2.8.4
Panerati, Jacopo	A	IAC-18.B3.6-A5.3.9
Pangalos, Katherine	CA	IAC-18.B5.2.12
Panicucci, Paolo	A	IAC-18.E2.2.12
Panitz, Corinna	CA	IAC-18.A1.6.1
Pansyrnyi, Oleg	CA	IAC-18.B4.6B.3
Panzenboeck, Elisabeth	CA	IAC-18.A6.10-C1.7.7
Paolozzi, Antonio	A	IAC-18.C2.8.13
Papadimitriou, Angeliki	A	IAC-18.B5.2.12
Papadimitriou, Angeliki	CA	IAC-18.E3.IP.3
Papadimitriou, Angeliki	A	IAC-18.D2.9-D6.2.5
Papadopoulos, Evangelos	CA	IAC-18.D1.6.10
Papakonstantinou, Constantine	CA	IAC-18.C2.8.5
Papic, Alvaro	CA	IAC-18.D1.1.2
Pappalardo, Raffaella	CA	IAC-18.E1.7.10
Paradiso, Nunzia Maria	A	IAC-18.E3.1.7
Parameswaran, Mohini	CA	IAC-18.B6.1.3
Paranjape, Aditya	CA	IAC-18.C1.4.12
Pardini, Carmen	A	IAC-18.C1.1.12
Pardini, Carmen	CA	IAC-18.A6.7.7
PARHI, ACHUTANANDA	A	IAC-18.C4.IP.49
Pari, Pierpaolo	CA	IAC-18.A4.1.9
Pari, Pierpaolo	CA	IAC-18.A4.1.11
Parikh, Joy	CA	IAC-18.D1.2.8
Paris, Claudio	CA	IAC-18.C2.6.5
Paris, Claudio	CA	IAC-18.C2.6.6
PARIS, Thibault	A	IAC-18.E1.4.5
Parisi, Leonardo	A	IAC-18.A6.IP.11
Parisi, Leonardo	A	IAC-18.A6.IP.22
Parisi, Leonardo	A	IAC-18.A6.IP.36
Parizel, Paul M	CA	IAC-18.A1.2.14
Park, Jung Ho	CA	IAC-18.A3.IP.58
Park, Jung Ho	A	IAC-18.B2.IP.11
Parker, Jeffrey	CA	IAC-18.A3.IP.18
Parker, Joel	CA	IAC-18.B2.5.5
Parkes, Steve	A	IAC-18.D1.3.4
Parreira, Baltazar	CA	IAC-18.C1.5.10
Parrella, Rosa Maria Lucia	A	IAC-18.E3.4.11
Parrinello, Tommaso	CA	IAC-18.C1.IP.29
Parrish, Joe	CA	IAC-18.A3.3A.6
Parro, Victor	CA	IAC-18.A1.6.3
Parsons, Nick	CA	IAC-18.B2.7.2
Parthasarathy, Sudharsan	CA	IAC-18.A4.IP.6
Parwez, Nabil	CA	IAC-18.A5.1.9
Pasadena, Wely	CA	IAC-18.B1.1.13
Pasala, Bharath Kumar Reddy	A	IAC-18.B2.2.9
Pascale, Roberta	CA	IAC-18.D4.1.8
Pascale, Roberta	CA	IAC-18.A5.1.5
Pasco, Xavier	CA	IAC-18.E6.3.7
Pasi, Kishore	A	IAC-18.B1.2.9
Pasquinelli, Mauro	CA	IAC-18.D2.4.8
Passarelli, Mitchell	CA	IAC-18.E2.3-GTS.4.7
PASSERON, Arno	CA	IAC-18.E1.4.5
Pastor, Otto	CA	IAC-18.A5.IP.5
Pastor-Rodríguez, Alejandro	A	IAC-18.A6.9.9
Pastore, Roberto	CA	IAC-18.C2.8.1
Pataranutaporn, Pat	CA	IAC-18.E1.2.8
Pate, Sweety	A	IAC-18.D1.IP.23
Pate, Sweety	CA	IAC-18.B6.2.5
Patel, Chirag	CA	IAC-18.A1.5.10
Patel, Divyesh	CA	IAC-18.B3.9-GTS.2.5
Pathak, Raghav	CA	IAC-18.A3.3B.12
Pathak, Shashank	CA	IAC-18.D3.2.9

Pathak, Shashank	CA	IAC-18.A4.IP.7
Pathak, Shashank	CA	IAC-18.D3.IP.5
Pathak, Shashank	CA	IAC-18.C3.4.8
Pathak, Shashank	CA	IAC-18.D4.5.12
Patil, Rahul	CA	IAC-18.E2.4.10
Patterson, Michael	CA	IAC-18.C4.4.1
Paul, Michael	CA	IAC-18.D4.4.2
Paul, Robert	A	IAC-18.A3.3B.4
Pauline, Faure	CA	IAC-18.D5.1.6
Pavarin, Daniele	CA	IAC-18.C4.8-B4.5A.2
Pavesi, Giulia	A	IAC-18.A6.8.5
Pavesi, Sara	CA	IAC-18.C4.5.3
Pavlova, Elena	CA	IAC-18.A6.7.5
Pavlyuchenko, Veronika	CA	IAC-18.E2.4.8
Pavone, Rosario	A	IAC-18.E3.3.5
Payne, Tamara	CA	IAC-18.A6.10-C1.7.2
Payson, Dmitry	A	IAC-18.E6.2.8
Pazmandi, Tamas	CA	IAC-18.A1.5.2
Pazmandi, Tamas	CA	IAC-18.A1.5.11
Pearce, Sarah	CA	IAC-18.B4.4.12
Pearce, Sarah	CA	IAC-18.D4.2.2
Pearce, Sarah	CA	IAC-18.E3.3.1
Peck, David	CA	IAC-18.E2.2.7
Pedersen, Don	CA	IAC-18.B3.4-B6.4.7
Pedivellano, Antonio	CA	IAC-18.B4.2.7
Pedrini, Daniela	CA	IAC-18.C4.4.8
Peer, Makthoum	CA	IAC-18.E5.1.6
Peer, Mohamed Makthoum	CA	IAC-18.D3.3.7
Peipsi, Aleko	CA	IAC-18.A1.IP.17
Pelich, Ramona-Maria	CA	IAC-18.B3.9-GTS.2.3
Pelich, Ramona-Maria	A	IAC-18.B5.2.6
Pelivan, Ivanka	CA	IAC-18.A3.4B.6
Pell, Sarah Jane	A	IAC-18.E5.1.11
Pell, Sarah Jane	A	IAC-18.B3.9-GTS.2.15
Pell, Sarah Jane	A	IAC-18.E5.IP.5
Pellacani, Andrea	CA	IAC-18.A3.4A.7
Pellacani, Andrea	CA	IAC-18.A3.IP.54
Pellander, Erik	A	IAC-18.E7.IP.7
Pellegrino, Alice	CA	IAC-18.A6.10-C1.7.9
Pellegrino, Alice	CA	IAC-18.B4.6B.10
Pellegrino, Alice	CA	IAC-18.E5.5.3
Pellegrino, Massimo	A	IAC-18.E3.4.8
Pellegrino, Sergio	CA	IAC-18.B4.2.7
Pellizzoni, Alberto	CA	IAC-18.A4.1.9
Pellouin, Clément	A	IAC-18.C4.6.3
Peloni, Alessandro	CA	IAC-18.A3.4B.6
Peltz, Leora	CA	IAC-18.A1.7.11
Penasa, Luca	CA	IAC-18.A3.1.12
Peng, Fujun	CA	IAC-18.C2.9.13
Peng, Hao	A	IAC-18.A6.7.3
Peng, Jinlong	CA	IAC-18.C2.7.12
Peng, LIU	CA	IAC-18.B1.IP.1
Peng, Ting	CA	IAC-18.B4.6A.8
Peng, Wang	CA	IAC-18.C4.9.9
Peng, Xiaodong	CA	IAC-18.D1.IP.29
Peng, Yang	CA	IAC-18.B2.IP.3
Peng, Zhang	CA	IAC-18.B2.IP.7
Pennec, Yan	A	IAC-18.B3.7.3
Penzel, Thomas	CA	IAC-18.A1.4.9
Pepermans, Lars	A	IAC-18.D2.5.12
Pepper, Sean	CA	IAC-18.B4.8.5
Perakis, Nikolaos	CA	IAC-18.D4.4.6
Percy, Thomas	CA	IAC-18.A3.1.3
Perczynski, Piotr	A	IAC-18.D3.2.11
Pereda, Alexandre	CA	IAC-18.E1.6.10
Pereda-Loth, Veronica	CA	IAC-18.A1.8.17
Pereira, Aaron	CA	IAC-18.D1.1.9
Perera, Mali	CA	IAC-18.E4.2.3
Perera, Sumudu	CA	IAC-18.E1.4.7
Perey, Christine	CA	IAC-18.B5.1.11
Perez, Karina	CA	IAC-18.E4.3B.8
Perez Cano, Jose Santiago	CA	IAC-18.B4.2.2
Perez Montenegro, Carlos	CA	IAC-18.C1.IP.26
Perfetto, Sara	CA	IAC-18.C2.5.13
Perfumo, Amedea	CA	IAC-18.A1.6.3
Perini, Federico	CA	IAC-18.A6.1.9
Perini, Federico	CA	IAC-18.A6.IP.10
Perlmutter, Kai	A	IAC-18.B1.5.10
Pernechele, Claudio	CA	IAC-18.C1.3.5
Peron, Roberto	CA	IAC-18.C1.1.12
Peroni, Marco	CA	IAC-18.A3.2A.11
Perozzi, Ettore	CA	IAC-18.A6.7.7
Perrel, Françoise	CA	IAC-18.D2.7.8
Perrelli, Francesco	CA	IAC-18.D3.IP.7
Perret, Alain	CA	IAC-18.D4.1.19
Perrichon, Lisa	CA	IAC-18.E3.4.7
Perrichon, Lisa	CA	IAC-18.D5.4.1
Perrino, Raphael	CA	IAC-18.E6.2.1
Perrodin, Delphine	CA	IAC-18.A4.1.9
Perrodin, Delphine	CA	IAC-18.A4.1.11
Perron, Frédéric	CA	IAC-18.E1.IP.23
Perry, Eric	CA	IAC-18.C4.5.10
Perry, Eric	A	IAC-18.C4.IP.38
Perry, Matthew	CA	IAC-18.D3.3.1
Persad, Aaron H.	A	IAC-18.A3.3B.9
Pertsov, Andrey	CA	IAC-18.E2.4.8
Pervez, Jewel	CA	IAC-18.A6.3.9
Pervez, Jewel	A	IAC-18.D1.IP.8
Perycz, Malgorzata	CA	IAC-18.A1.1.13
Perycz, Malgorzata	A	IAC-18.B6.3.4
Perycz, Malgorzata	CA	IAC-18.A1.7.12
Pesce, Anastasia	A	IAC-18.D3.4.5
Pesce, Dario	CA	IAC-18.A3.1.12
Pesce, Vincenzo	CA	IAC-18.D1.3.2
Pesce, Vincenzo	CA	IAC-18.D1.3.3
Pesthy, Orsolya	CA	IAC-18.E1.IP.3
Peters, Achim	CA	IAC-18.A2.1.7
Peters, Achim	CA	IAC-18.A2.1.8
Peters, Achim	CA	IAC-18.A2.1.9
Peters, Thomas Vincent	CA	IAC-18.D1.3.1
Peters, Thomas Vincent	CA	IAC-18.A7.3.2
Petersen, Emily	A	IAC-18.D4.1.4
Peterson, Glenn	A	IAC-18.A6.7.6
Petieau, Mathieu	CA	IAC-18.A1.IP.34
Petit, Gaetan	A	IAC-18.A1.IP.34
Petre, Roxana-Alexandra	CA	IAC-18.E4.1.9
Petrov, Oleg	CA	IAC-18.A2.6.3
Petrov, Valery D.	A	IAC-18.D4.1.2
Petrova, Tatyana	CA	IAC-18.C1.5.7
Petrovici, Gina	A	IAC-18.E7.1.8
Petrozzi Ilstad, Marina	CA	IAC-18.D2.7.6
Petschelt, Stefan	A	IAC-18.A2.6.4
Peyrard, Julien	CA	IAC-18.A7.3.2
Peñarroya Rodríguez, Pelayo	A	IAC-18.C1.3.7
Peñin, Luis F.	A	IAC-18.D1.2.1
Pfaff, Aron	CA	IAC-18.C2.5.11
Pfändler, Nadine	CA	IAC-18.A2.2.11
Pham, Evan	CA	IAC-18.E2.3-GTS.4.12
Phan, Léon	A	IAC-18.D1.2.6
Philip, N K	CA	IAC-18.C1.IP.16
Phillips, Scott	CA	IAC-18.A1.2.28
Philpot, Claudia	CA	IAC-18.B3.9-GTS.2.2
Phlaengsorn, Pachara	A	IAC-18.B4.8.15
Phou, Naron	CA	IAC-18.D1.4B.3
Phrompichai, Samphan	CA	IAC-18.E1.4.9
Phylippov, Yuriy	CA	IAC-18.A2.IP.1
Picard, Martin	CA	IAC-18.A3.1.10
Picard, Martin	CA	IAC-18.A3.2B.6
Piccirillo, Sara	CA	IAC-18.E1.3.6
Pichon, Thierry	A	IAC-18.C4.3.2
Pickett, Melanie	A	IAC-18.A1.7.2
Pieralice, Francesca	CA	IAC-18.B2.4.2
Piergentili, Fabrizio	CA	IAC-18.A6.1.8
Piergentili, Fabrizio	CA	IAC-18.E1.3.7
Piergentili, Fabrizio	CA	IAC-18.B2.3.5
Piergentili, Fabrizio	CA	IAC-18.A6.9.8
Piergentili, Fabrizio	CA	IAC-18.A6.IP.4
Piergentili, Fabrizio	CA	IAC-18.A6.IP.22
Piergentili, Fabrizio	CA	IAC-18.C2.IP.19
Piergentili, Fabrizio	CA	IAC-18.A6.10-C1.7.9
Piergentili, Fabrizio	CA	IAC-18.B4.6B.10
Piergentili, Fabrizio	CA	IAC-18.A6.7.7
Piergentili, Fabrizio	CA	IAC-18.B2.7.4
Pieroux, Didier	CA	IAC-18.B3.4-B6.4.10
Piersanti, Emanuele	CA	IAC-18.A6.5.3
Piest, Baptist	CA	IAC-18.A2.3.5
Pietronigro, Frank	CA	IAC-18.E5.IP.10
Pigliaru, Lucia	A	IAC-18.C2.8.7
Pignatelli, David	CA	IAC-18.B4.5.14
Pignolet, Guy	A	IAC-18.C3.2.9
PIGULEVSKI, IOURI	A	IAC-18.C4.IP.12
Pilato, Giuseppe	CA	IAC-18.A3.5.4
Pilato, Giuseppe	CA	IAC-18.C2.8.5
Pilia, Maura	CA	IAC-18.A4.1.9
Pilia, Maura	CA	IAC-18.A4.1.11
Pilone, Daniela	CA	IAC-18.C2.8.13
Pimienta-Penalver, Adonis	A	IAC-18.C1.3.3
Pinarello, Giordano	CA	IAC-18.A3.2C.4
Pinazo-Herrero, Benjamín	A	IAC-18.C2.IP.2
Ping, YANG	CA	IAC-18.B1.IP.1
Pingel, André	A	IAC-18.A2.3.2
Pino, Fabio	CA	IAC-18.D4.1.8
Pino, Fabio	CA	IAC-18.A5.1.5
Pino, Fabio	CA	IAC-18.B4.7.9
Pinol Sole, Montserrat	A	IAC-18.E1.IP.33
Pinsky, Lawrence	CA	IAC-18.B4.2.9
Pinsky, Lawrence	A	IAC-18.A1.5.3
Pinto, Alberto	CA	IAC-18.A2.5.8
Pinto, Fernando	A	IAC-18.C4.4.12
Pinto, Fernando	CA	IAC-18.C3.4.11
Pinto, Mário	A	IAC-18.B6.IP.1
Pinto Gomes, Vera	A	IAC-18.D4.2.1
Pinto Gomes, Vera	CA	IAC-18.E6.2.2
Pinty, Bernard	CA	IAC-18.B1.2.7
Pintó, Pedro	CA	IAC-18.B2.4.4
PINUMALLA, KIRAN	CA	IAC-18.C4.IP.5
PINUMALLA, KIRAN	A	IAC-18.C4.IP.10
Piotelat, Elisabeth	A	IAC-18.A4.2.12
Piperno, Osvaldo	CA	IAC-18.B1.5.12
Piperno, Osvaldo	CA	IAC-18.E7.IP.6
Piragino, Antonio	CA	IAC-18.C4.4.8
Piras, Annamaria	A	IAC-18.B3.7.7
Pireddu, Federica	CA	IAC-18.B3.4-B6.4.5
Piro Barragam, Vinicius	A	IAC-18.C2.3.7
Pirrotta, Simone	CA	IAC-18.B4.2.11
Pirrotta, Simone	CA	IAC-18.B4.8.1
Pirschel, Kjell	CA	IAC-18.B4.6B.14
Pisanu, Tonino	CA	IAC-18.A4.1.9
Pisanu, Tonino	CA	IAC-18.A6.7.7
Piscitelli, Prisco	A	IAC-18.A1.3.10
Piskacev, Marko	CA	IAC-18.A3.2C.3
Piskacev, Marko	CA	IAC-18.A3.2C.4
Pisoni, Beatriz	CA	IAC-18.E1.7.10
Pisot, Nathalie	CA	IAC-18.E6.3.7
Pisseloup, Aurelien	CA	IAC-18.A6.5.1
Pivetta, Fabio	A	IAC-18.A1.2.25
Pivetta, Fabio	CA	IAC-18.A1.4.2
Pivetta, Fabio	CA	IAC-18.A1.4.8
Pivetta, Fabio	CA	IAC-18.A1.4.10
Pivit, Florian	A	IAC-18.A3.IP.15
Piña López, Yair Israel	A	IAC-18.C3.3.8
Piña López, Yair Israel	A	IAC-18.E6.2.10
Piña López, Yair Israel	A	IAC-18.C2.6.12
Piña López, Yair Israel	CA	IAC-18.A3.IP.48
Piña López, Yair Israel	CA	IAC-18.E1.IP.7
Platt, Don	CA	IAC-18.A2.IP.3
Plattard, Serge	A	IAC-18.E3.2.1
Plazovnik, Lukas	A	IAC-18.D4.1.11
Plecki, Marge	CA	IAC-18.E1.2.6
Pleskachevsky, Andrey	CA	IAC-18.B1.5.3
Pleskachevsky, Andrey	CA	IAC-18.B1.5.4
Pliewischkies, André	A	IAC-18.D5.2.2
Plishke, Michael	CA	IAC-18.E2.3-GTS.4.12
Plomariti, Christina	A	IAC-18.A1.3.11
Plomariti, Christina	CA	IAC-18.A1.3.13
Poddubko, Svetlana	CA	IAC-18.A2.IP.5
Podhajsky, Sandra	CA	IAC-18.A1.6.4
Podhajsky, Sandra	CA	IAC-18.A1.6.7
Podhajsky, Sandra	CA	IAC-18.A1.7.3
Podhajsky, Sandra	A	IAC-18.A2.7.5
Podladchikova, Tatiana	CA	IAC-18.A1.IP.15
Pogkas, Nikos	CA	IAC-18.D3.2.12
Pogrebnoi, Anton	A	IAC-18.B3.7.10
POIREY, Gilles	CA	IAC-18.D2.5.3
Poliakov, Hennadii	CA	IAC-18.E8.1.1
Polli, Aldo	CA	IAC-18.C3.4.4
Pollice, Luciano	A	IAC-18.D1.IP.5
Pollini, Alexandre	CA	IAC-18.A6.5.1
Polsgrove, Tara	CA	IAC-18.A3.1.3
Pomyen, Siriphat	CA	IAC-18.B6.1.2
Pong, Christopher	CA	IAC-18.B4.3.4
Ponomarev, Sergey	CA	IAC-18.A1.3.3
Ponomarev, Sergey	A	IAC-18.A1.3.9
Ponomarev, Sergey	A	IAC-18.A1.4.14
Pont, Gabriel	A	IAC-18.A3.3B.5
Pontani, Mauro	CA	IAC-18.C1.1.10
Poornachandran, Siddharth	CA	IAC-18.B3.1.2
Popov, Garri A.	CA	IAC-18.C4.4.11
Popov, Garri A.	CA	IAC-18.C4.IP.34
Popova, Rada	CA	IAC-18.A6.4.6
Popova, Rada	CA	IAC-18.E7.5.1
Popova, Rada	A	IAC-18.E7.5.16
Popova, Rada	A	IAC-18.A6.8.9
Poppe, Georg	A	IAC-18.C4.2.8
Popper, Joseph	A	IAC-18.E1.9.4
Porras, Daniel	A	IAC-18.A6.8.4
Porretta, Marco	CA	IAC-18.B2.1.12
Portelli, Claudio	CA	IAC-18.A6.IP.10
Posielek, Tobias	A	IAC-18.C3.3.5
Posselt, Bonnie	A	IAC-18.A1.4.5
Possenti, Andrea	CA	IAC-18.A4.1.9
Post, Mark	A	IAC-18.D1.2.7
Postema, Rob	A	IAC-18.A3.2C.12
Potrivitu, George Cristian	CA	IAC-18.A1.3.16
Potrivitu, George Cristian	CA	IAC-18.A1.IP.40
Potrivitu, George Cristian	CA	IAC-18.B3.IP.14
Potvin, Marie-Josée	CA	IAC-18.C2.6.4
Pouplin, Jennifer	CA	IAC-18.B3.5.6
Powell, James	CA	IAC-18.D2.6.6
Powell, Stefan	CA	IAC-18.D2.6.6
Power, Laurie	CA	IAC-18.E1.IP.30
Pozdnyakov, Anton	CA	IAC-18.A6.10-C1.7.10
Pozner, Charles N.	CA	IAC-18.A1.3.5
Pozzobon, Riccardo	CA	IAC-18.A3.1.12
Prado, Antonio	CA	IAC-18.D4.IP.6
Prado, Jean-Yves	A	IAC-18.D4.1.19
Prado, Jean-Yves	CA	IAC-18.A3.IP.13
Prakash, Abhinav	A	IAC-18.B3.9-GTS.2.4
Prakash, Abhinav	A	IAC-18.B3.IP.15
Prakasha, Anuradha	CA	IAC-18.B2.2.6
Prakasha, Anuradha	A	IAC-18.B6.2.9
Praks, Jaan	CA	IAC-18.C3.IP.11
Pratt, William	A	IAC-18.E5.1.2
Pražák, Jakub	CA	IAC-18.D5.4.1
Preisinger, Clemens	CA	IAC-18.E5.1.6
Presti, Claudia	CA	IAC-18.E3.6.5
Prevost, Eddie	CA	IAC-18.B2.7.2
Price, Daniel	A	IAC-18.A4.1.2
Priest, Alexander	A	IAC-18.B4.2.5
Prieto, Ines	A	IAC-18.E5.5.2
Prieto, Juan	CA	IAC-18.D5.2.4
Prioroc, Claudiu-Lucian	A	IAC-18.A3.IP.54
Prioroc, Claudiu-Lucian	CA	IAC-18.A3.4B.4
PRIOTTO, Sébastien	A	IAC-18.C4.IP.45
Pripanapong, Suebsakul	CA	IAC-18.E1.4.7
Pritchard-Kelly, Ruth	CA	IAC-18.E7.2.12
Pritchett, Robert	A	IAC-18.C1.8.9
Pritykin, Dmitry	CA	IAC-18.A6.IP.28
Priyadarshan, Hari	CA	IAC-18.B4.2.7
PRIYANTO, IRWAN	CA	IAC-18.C2.IP.24

Probst, Alena	CA	IAC-18.B2.8-GTS.3.12
Probst, Dieter	CA	IAC-18.A6.1.7
Procchio, Silvia	CA	IAC-18.A3.3A.10
Proffe, Gerrit	CA	IAC-18.A6.6.2
Proffe, Gerrit	CA	IAC-18.A3.2C.4
Prohaska, Marcel	CA	IAC-18.A6.1.6
Prohaska, Steffen	CA	IAC-18.A1.4.15
Proietti Zolla, Paolo	CA	IAC-18.C2.2.4
Proietti Zolla, Paolo	A	IAC-18.B2.7.10
Propst, Martin	CA	IAC-18.C4.5.16
Propst, Martin	A	IAC-18.C4.10.4
Provenzano, Michael	A	IAC-18.E6.IP.6
Pruin, Bernard	A	IAC-18.B1.IP.3
Pruin, Bernard	A	IAC-18.B1.4.7
Prunariu, Dumitru-Dorin	A	IAC-18.E4.1.9
Pruvost, Clement	CA	IAC-18.A6.6.10
Prysyazhnyuk, Anastasiia	A	IAC-18.A1.4.13
Przigoda, Judith	CA	IAC-18.B6.2.8
Prziwara, Paul	CA	IAC-18.A3.2C.5
Przybyla, Bartos	CA	IAC-18.A1.5.10
Psoni, Georgia	CA	IAC-18.D2.7.6
Puccetti, Simonetta	CA	IAC-18.B4.2.11
Pugh, Michael	CA	IAC-18.B2.1.5
Puglia, Stefano	CA	IAC-18.E3.3.4
Puig, Ludovic	CA	IAC-18.C2.2.9
Puig-Suari, Jordi	CA	IAC-18.B4.5.14
Puig-Suari, Jordi	CA	IAC-18.D2.IP.12
Pulido, José A.	CA	IAC-18.C1.5.5
Pupillo, Giuseppe	CA	IAC-18.A6.1.9
Pupillo, Giuseppe	CA	IAC-18.A6.IP.10
Pursiainen, Sampsa	CA	IAC-18.B4.8.9
Pushkar, Ivan	CA	IAC-18.C2.IP.16
Pustylnik, Mikhail	A	IAC-18.A2.6.2
PUTEAUX, Maxime	A	IAC-18.B4.5.3
Puttasuwan, Keerati	CA	IAC-18.B6.1.2
Putzar, Robin	A	IAC-18.A6.3.5
Putzig, Nathaniel	CA	IAC-18.D3.3.1
Pántya, Annamária	CA	IAC-18.A1.5.11
Påhlsson, Philip	CA	IAC-18.D2.2.5
Pérez, Iván	CA	IAC-18.C1.1.2
Pérez-Lissi, Franco	A	IAC-18.B4.2.10
Pérez-Lissi, Franco	A	IAC-18.B5.2.13
Pérez-Palau, Daniel	CA	IAC-18.C1.8.6
Püttmann, Norbert	CA	IAC-18.C4.4.5

Q

Name	Role	Paper
Qazi, Omar	CA	IAC-18.E2.3-GTS.4.12
Qi, Rui	A	IAC-18.C1.3.10
Qi, Zhaohui	CA	IAC-18.C2.3.12
QIAN, ZHAN S.	CA	IAC-18.D2.6.9
Qiao, Dong	CA	IAC-18.A3.IP.11
Qiao, Lei	A	IAC-18.D5.1.12
Qiao, Zhang	CA	IAC-18.C2.IP.22
Qin, Fei	CA	IAC-18.C4.9.4
Qin, Jiang	CA	IAC-18.C4.9.7
Qin, Jiang	CA	IAC-18.C4.IP.7
Qiu, Chengbo	CA	IAC-18.D4.1.14
Qiu, Chengbo	CA	IAC-18.A3.IP.11
Qiu, Chengbo	CA	IAC-18.A3.4B.7
Qiu, Jia-wen	A	IAC-18.C2.6.10
Quadrelli, Marco	CA	IAC-18.B4.8.11
Quadrini, Fabrizio	CA	IAC-18.D1.1.3
Quan, Quan	CA	IAC-18.C4.5.13
Quansah, Joseph	CA	IAC-18.E1.1.11
Quansah, Joseph	CA	IAC-18.B4.9-GTS.5.4
Quantius, Dominik	A	IAC-18.B3.9-GTS.2.2
Quantius, Dominik	A	IAC-18.C1.IP.37
Quantius, Dominik	CA	IAC-18.A3.4B.6
Quaquaro, Benedetto	CA	IAC-18.E1.7.10
Quaranta, Albino	CA	IAC-18.D3.2.12
Quaranta, Albino	CA	IAC-18.D3.IP.2
Queeckers, Patrick	CA	IAC-18.C2.8.5
QUERRY, Stéphane	CA	IAC-18.D2.5.3
Quinn, Marshall	A	IAC-18.D3.IP.4
Quinn, Richard	CA	IAC-18.A1.6.3
Quinn, Richard	CA	IAC-18.A1.6.8
Quiros Jimenez, Olman	CA	IAC-18.B4.4.5
Qureshi, Anisa	CA	IAC-18.D4.4.13
Qureshi, Anisa	CA	IAC-18.D4.4.14

R

Name	Role	Paper
R, Aditya	CA	IAC-18.A6.IP.26
R Koushik, Pradyumna	CA	IAC-18.A1.8.5
R R, KARTHIKA	CA	IAC-18.A6.4.9
R.P, Uma Dhevi	CA	IAC-18.C4.5.4
Raasted, Claus	CA	IAC-18.E1.8.4
Raatschen, Willigert	CA	IAC-18.D4.2.9
Rabaioli, Massimo	CA	IAC-18.B6.3.6
Rabbow, Elke	CA	IAC-18.A1.6.1
Rabbow, Elke	CA	IAC-18.A1.6.2
Rabbow, Elke	CA	IAC-18.A3.5.11
Rabineau, Jeremy	A	IAC-18.A1.2.5
Rachkin, Dmitry	CA	IAC-18.E2.4.8
Rachkin, Dmitry	CA	IAC-18.C2.IP.16
Rachman, Abdul	A	IAC-18.A6.1.3
Radhakrishnan, Vikram	CA	IAC-18.D4.5.3
Radu, Silvana	CA	IAC-18.C1.5.10
Radu, Silvana	A	IAC-18.B4.6B.5
Rael, Harvey	CA	IAC-18.E2.3-GTS.4.11
Rafalskyi, Dmytro	CA	IAC-18.C4.8-B4.5A.8
Rafano Carnà, Simone Flavio	A	IAC-18.D1.IP.1
Rafiq, Ahsan	A	IAC-18.B2.8-GTS.3.8
Raghavan, Jeenu	CA	IAC-18.C4.IP.5
Raghavan, Jeenu	CA	IAC-18.C4.IP.10
Rahmatillah, Rahmi	A	IAC-18.B4.2.3
Rahmatillah, Rahmi	CA	IAC-18.B4.7.10
Raia, Andrea	CA	IAC-18.D3.IP.7
Raimalwala, Kaizad	CA	IAC-18.A3.2B.9
Raj, Sathesh	A	IAC-18.B1.IP.21
Raj, Sathesh	A	IAC-18.E1.9.8
Rajendran, Adithya	CA	IAC-18.E6.1.9
Ramanujam, V Manavalan	CA	IAC-18.B1.3.9
Ramasamy, Rohan	A	IAC-18.C3.4.10
Ramaswamy, Basak	CA	IAC-18.C1.8.12
Ramirez, Julio	CA	IAC-18.B4.1.4
Ramos, Brian	A	IAC-18.A1.IP.6
Ramraj, Santhanakrishnan	CA	IAC-18.A1.5.12
Rana, Loveneesh	CA	IAC-18.D1.IP.23
Rana, Zaid	A	IAC-18.B4.4.6
Rana, Zaid	A	IAC-18.A3.IP.7
Rana, Zaid	CA	IAC-18.B6.2.5
Randall, Suzanna	CA	IAC-18.B3.2.10
Ranera, Franck	CA	IAC-18.B1.1.12
Rangel- Hernandez, Patty	A	IAC-18.E1.8.4
Rangel- Hernandez, Patty	CA	IAC-18.E1.IP.30
Ranjan, Ravi	A	IAC-18.C4.8-B4.5A.11
Rankin, Kyle	A	IAC-18.A7.3.9
Rantalainen, Timo	CA	IAC-18.A1.2.25
Rantalainen, Timo	CA	IAC-18.A1.4.2
Rao, Mukund Kadursrinivas	A	IAC-18.B5.2.3
Rao, Mukund Kadursrinivas	A	IAC-18.B5.3.7
RAO, SANDYA	A	IAC-18.C3.2.5
RAO, SANDYA	A	IAC-18.B2.3.4
Rao, Wei	A	IAC-18.C4.9.11
Rao, Wei	CA	IAC-18.C4.IP.15
Rao A, Divya	CA	IAC-18.E2.4.7
RAPP, Lucien	CA	IAC-18.E3.4.10
Rapp, Thomas	A	IAC-18.B4.3.13
Rarata, Grzegorz	CA	IAC-18.C4.3.12
Rasel, Ernst Maria	CA	IAC-18.A2.1.12
Rasel, Ernst Maria	CA	IAC-18.A2.1.13
Rasel, Ernst Maria	CA	IAC-18.A2.3.5
Rasel, Ernst Maria	CA	IAC-18.A2.IP.7
RASHID, KHALID	A	IAC-18.C4.10.6
Rasoni, Carlo Alberto	CA	IAC-18.D1.IP.5
Rastel, Laurent	CA	IAC-18.A3.3B.10
Ratcliffe, Andrew	A	IAC-18.D6.1.1
Rathinam, Arunkumar	A	IAC-18.C1.IP.5
Rathnasabapathy, Minoo	CA	IAC-18.E5.2.4
Rathsman, Anna	CA	IAC-18.D2.2.5
Rattenbury, Nicholas	CA	IAC-18.E1.3.1
Ratushnyy, Andrey	A	IAC-18.A1.8.11
Rauch, Thomas	CA	IAC-18.A7.3.7
Rauen, Lori	CA	IAC-18.B3.1.2
Ravagnolo, Liliana	CA	IAC-18.B6.3.6
Ravan, Shirish	CA	IAC-18.E3.1.3
Ravan, Shirish	A	IAC-18.B1.5.2
Ravanbakhsh, Ali	A	IAC-18.C2.1.5
Rave, Xavier	CA	IAC-18.A3.3B.10
Ravel, Karen	CA	IAC-18.B2.7.2
ravi shankar, H.N.	CA	IAC-18.A1.8.5
Ravichandran, Aravind	CA	IAC-18.B2.3.8
Ravichandran, Srinath	CA	IAC-18.D2.2.10
Rayman, Marc D.	A	IAC-18.A3.4A.1
Razavi, Alireza	CA	IAC-18.E2.3-GTS.4.7
Razavi, Mohammad Reza	CA	IAC-18.E2.3-GTS.4.7
Razavi, Mohammad Reza	CA	IAC-18.E2.1.6
Razeto, Alberto	CA	IAC-18.A3.2C.8
Razoumny, Yury	A	IAC-18.C1.8.3
Reali, Marco	CA	IAC-18.A6.1.9
Reali, Marco	CA	IAC-18.A6.IP.10
Reali, Marco	CA	IAC-18.A6.7.7
Rebele, Bernhard	CA	IAC-18.D1.IP.27
Rebeyre, Pierre	CA	IAC-18.B3.7.4
Rebrov, Andrei	CA	IAC-18.E6.1.2
Reck, Christoph	CA	IAC-18.B1.4.2
Reddy, Vishnu	CA	IAC-18.A3.2A.7
Reddy, Vishnu	CA	IAC-18.B4.8.5
Reed, Cheryl	A	IAC-18.A3.4A.4
Reed, Cheryl	CA	IAC-18.C1.9.7
Reed, Nikolai	CA	IAC-18.B4.3.12
Reershemius, Siebo	CA	IAC-18.C2.1.7
Reershemius, Siebo	CA	IAC-18.C2.1.10
Reershemius, Siebo	CA	IAC-18.A6.5.3
Reershemius, Siebo	CA	IAC-18.C3.4.3
Reershemius, Siebo	CA	IAC-18.A3.4B.6
Refle, Oliver	CA	IAC-18.B4.6A.12
Reganaz, Mattia	CA	IAC-18.A3.2A.9
Reganaz, Mattia	CA	IAC-18.A7.2.6
Regele, Ralf	A	IAC-18.B3.IP.6
Reh, Kim	CA	IAC-18.A3.5.6
Rehnberg, Lucas	CA	IAC-18.A1.4.5
Reibaldi, Giuseppe	CA	IAC-18.D3.1.1
Reibaldi, Giuseppe	CA	IAC-18.E7.5.18
Reichmann, Olaf	CA	IAC-18.B2.7.10
Reid, Ewan	A	IAC-18.A3.2B.9
Reid, Robert G.	CA	IAC-18.A3.4B.5
Reidt, Ulrich	CA	IAC-18.A2.IP.5
Reidt, Ulrich	CA	IAC-18.A1.7.8
Reihs, Benedikt	A	IAC-18.A6.9.10
Reill, Josef	CA	IAC-18.A3.2A.8
Reill, Josef	CA	IAC-18.C2.5.1
Reill, Josef	CA	IAC-18.A3.4A.2
Reimann, Bodo	CA	IAC-18.D2.6.3
Reiner, Matthias	A	IAC-18.A6.5.5
Reiner, Matthias	CA	IAC-18.D1.6.10
Reiss, Philipp	CA	IAC-18.A3.2A.9
Reissner, Alexander	CA	IAC-18.C2.7.11
Reiter, Jason	A	IAC-18.A6.9.6
Relógio, Angela	A	IAC-18.A1.4.16
Rembala, Richard	CA	IAC-18.B3.4-B6.4.11
Ren, Leisheng	CA	IAC-18.A6.3.6
Renaud, Laurent	CA	IAC-18.C4.10.13
Renga, Alfredo	CA	IAC-18.B4.7.11
Renger, Thomas	CA	IAC-18.A3.4B.6
Renk, Florian	CA	IAC-18.C1.1.11
Renk, Florian	CA	IAC-18.C1.8.7
Retat, Ingo	CA	IAC-18.B3.4-B6.4.7
Retat, Ingo	CA	IAC-18.B3.9-GTS.2.2
Retat, Ingo	CA	IAC-18.A6.6.8
Rettberg, Petra	A	IAC-18.A1.6.1
Rettberg, Petra	CA	IAC-18.A3.5.11
Reviznikov, Dmitry	CA	IAC-18.C2.7.4
Reyes Mantilla, Camilo Andrés	CA	IAC-18.A5.1.9
Reyes Mantilla, Camilo Andrés	CA	IAC-18.A3.IP.7
Reyes Mantilla, Camilo Andrés	CA	IAC-18.E5.5.9
Reymen, Isabelle	CA	IAC-18.D5.2.8
Reyneri, Leonardo M.	CA	IAC-18.C3.IP.11
Reza, Maryam	CA	IAC-18.C4.4.8
Rezende, Julio	A	IAC-18.D4.2.6
Rezende, Julio	A	IAC-18.A3.IP.68
Ri, Changin	A	IAC-18.B1.IP.11
Riaño Alfonso, Cristian Alexander	CA	IAC-18.E5.1.12
Riccardi, Annalisa	CA	IAC-18.D5.2.5
Riccardi, Luisa	CA	IAC-18.E5.5.3
Ricci, Daniele	CA	IAC-18.C4.4.14
Ricci, Daniele	CA	IAC-18.C4.5.7
Ricci, Mauro	CA	IAC-18.B3.3.11
Ricci, Mauro	CA	IAC-18.E1.2.3
Ricco, Antonio J	CA	IAC-18.A1.6.3
Ricco, Antonio J	CA	IAC-18.A1.6.8
Riccobono, Dario	A	IAC-18.D4.4.5
Richards, Robert D.	CA	IAC-18.A3.1.8
Richards, Robert D.	CA	IAC-18.B4.8.7
Richert, Philip	CA	IAC-18.C2.1.8
Richter, Lutz	A	IAC-18.A3.2A.9
Rick, Matthias	CA	IAC-18.A3.5.7
Rickmers, Peter	A	IAC-18.D2.6.1
Riecke, Bernhard	CA	IAC-18.A1.4.19
Riecke, Cornelia	CA	IAC-18.B3.6-A5.3.5
Riedel, Jörg	CA	IAC-18.B2.IP.21
Rieger, Florian	CA	IAC-18.B2.5.6
Riehmer, Johannes	CA	IAC-18.D2.6.3
Riel, Thomas	CA	IAC-18.B4.3.3
Riemann, Johannes	CA	IAC-18.A3.4B.6
Riemer, Arne	CA	IAC-18.A6.5.3
Rienow, Andreas	A	IAC-18.B1.2.11
Rienow, Andreas	CA	IAC-18.E1.2.1
Riesselmann, Jens	CA	IAC-18.C2.6.9
Riesselmann, Jens	A	IAC-18.C2.8.8
Rievers, Benny	CA	IAC-18.A2.1.2
Rievers, Benny	CA	IAC-18.A2.1.3
Rievers, Benny	CA	IAC-18.C1.IP.11
Rievers, Benny	CA	IAC-18.D1.IP.32
Rigaut, Francois	CA	IAC-18.A6.6.3
Righetti, Pier Luigi	CA	IAC-18.C1.IP.25
Riley, David	CA	IAC-18.B4.5.9
Riley, David	CA	IAC-18.C1.9.2
Rinaldi, Marianna	CA	IAC-18.C2.8.7
Rinaldi, Marianna	CA	IAC-18.C2.9.11
Rinner, Christian	CA	IAC-18.B1.IP.9
Risi, Ben	A	IAC-18.C4.8-B4.5A.12
Risse, Eicke-Alexander	CA	IAC-18.B4.6A.8
Rissons, Angelique	CA	IAC-18.E2.4.4
Ristov, Martin	A	IAC-18.D1.IP.30
Ritorto, Alberto	CA	IAC-18.C4.IP.53
Ritter, Zully	A	IAC-18.A1.4.15
Rittweger, Jörn	CA	IAC-18.A1.2.25
Rittweger, Jörn	CA	IAC-18.A1.4.2
Ritz, David	A	IAC-18.C4.IP.18
Riva, Nicola	CA	IAC-18.C2.3.1
Riva, Stefano	CA	IAC-18.C3.4.4
Riveros, Alain	A	IAC-18.A1.4.7
Riveros, Alain	CA	IAC-18.A1.4.21
Rivkin, Andrew	CA	IAC-18.A3.4B.8
Rivkin, Andrew	CA	IAC-18.C1.9.7
Rivolta, Aureliano	CA	IAC-18.A1.3.16
Rivolta, Aureliano	CA	IAC-18.B3.9-GTS.2.5
Rivolta, Aureliano	CA	IAC-18.A1.IP.40
Rivolta, Aureliano	CA	IAC-18.B3.IP.14
Riwaldt, Stefan	CA	IAC-18.A1.8.7
Riwaldt, Stefan	CA	IAC-18.A1.8.8
Riwaldt, Stefan	CA	IAC-18.A2.7.11
Rizzo, Emanuele	CA	IAC-18.A1.3.10
Rmili, Badr	CA	IAC-18.D2.5.3

Robert, Alain	CA	IAC-18.A2.1.1
Robert, Hahn	CA	IAC-18.A6.5.3
Roberts, Mia	CA	IAC-18.E1.4.7
Roberts, Peter C.E	CA	IAC-18.C4.6.4
Roberts, Peter C.E.	CA	IAC-18.B4.2.2
Robertson, Jamie M.	CA	IAC-18.A1.3.5
Robertson, Jeremiah	CA	IAC-18.D5.1.9
Robinson, Calvin	CA	IAC-18.D4.1.1
Robinson, Jana	A	IAC-18.D5.4.1
Robinson, Julie A.	CA	IAC-18.B3.3.3
Robinson, Kimberly	A	IAC-18.B4.5.8
Robinson, Kimberly	CA	IAC-18.D2.8-A5.4.1
Robinson, Peter	A	IAC-18.D4.3.6
Robison, Kathryn	A	IAC-18.B3.IP.4
Robison, Kathryn	A	IAC-18.E5.IP.1
Robles Hernández, Tania María	CA	IAC-18.D3.1.6
Robles Hernández, Tania María	CA	IAC-18.D3.IP.6
Robles-Morales, Fernando	CA	IAC-18.B1.4.10
Robson, Daniel	CA	IAC-18.A5.1.5
Robson, Daniel	CA	IAC-18.E3.IP.13
Rocha de Carvalho, Luiz Fernando	CA	IAC-18.B1.5.8
Rodin, Evgeniy	CA	IAC-18.D2.4.2
Rodrigues, Goncalo	CA	IAC-18.C2.1.11
Rodrigues, Jhonny	CA	IAC-18.C2.2.9
Rodrigues, Manuel	A	IAC-18.A2.1.1
Rodrigues, Victor	CA	IAC-18.A3.IP.68
Rodriguez Fernandez, Oscar	A	IAC-18.A6.7.4
Rodriguez Vargas, Stephanie	CA	IAC-18.B4.4.5
Rodriguez-Donaire, Silvia	CA	IAC-18.B4.2.2
Rodriguez-Donaire, Silvia	CA	IAC-18.C4.6.4
Rodríguez, Diego	CA	IAC-18.D1.2.1
Rodríguez-Martínez, Pedro	CA	IAC-18.C2.IP.2
Roelof, Edmond	CA	IAC-18.D4.4.2
Roger, Jegou	CA	IAC-18.D5.2.6
Rogon, Christian	CA	IAC-18.A1.3.3
Rogon, Christian	CA	IAC-18.A1.3.9
Rogon, Christian	CA	IAC-18.A1.IP.17
Rohr, Thomas	CA	IAC-18.C2.8.7
Rohrbeck, Mathias	CA	IAC-18.D3.2.10
Rohrwild, Karlheinz	CA	IAC-18.E4.2.5
Rojas, Juan J.	CA	IAC-18.B4.1.4
Rojas Alva, Ulises	A	IAC-18.A2.4.1
Rojas Gomez, Armando	CA	IAC-18.D4.4.13
Rojas Gomez, Armando	CA	IAC-18.D4.4.14
Rojas Quesada, Mariela	A	IAC-18.B4.4.5
Rojas Quesada, Mariela	CA	IAC-18.B1.5.5
Rojas Quesada, Mariela	CA	IAC-18.E1.1.3
Roma, Alfredo	CA	IAC-18.D4.2.12
Roma, Mauro	CA	IAC-18.A6.IP.10
Roman-Gonzalez, Avid	CA	IAC-18.E5.2.7
Roman-Gonzalez, Avid	A	IAC-18.E5.4.11
Romanazzo, Massimo	CA	IAC-18.C1.IP.25
Romanelli, Nicola	CA	IAC-18.D6.3.4
Romanenko, Dmitry	CA	IAC-18.E2.4.8
Romani, Romano	CA	IAC-18.C3.4.4
Romano, Diego Giuseppe	CA	IAC-18.D2.7.8
Romano, Diego Giuseppe	CA	IAC-18.D1.4B.12
Romano, Francesco	CA	IAC-18.B4.2.2
Romano, Francesco	A	IAC-18.C4.6.4
Romano, Leone Ermes	CA	IAC-18.E1.3.6
Romano, Matteo	A	IAC-18.A3.5.10
Romberg, Oliver	CA	IAC-18.B3.9-GTS.2.2
Romei, Federico	CA	IAC-18.A6.3.7
Romero Martín, Juan Manuel	CA	IAC-18.A5.1.6
Romero-Alva, Victor	A	IAC-18.E5.2.7
Rommelaere, Simon	A	IAC-18.D1.4A.2
Rondao, Duarte	A	IAC-18.C1.IP.3
Roque, Pedro	A	IAC-18.A3.IP.16
Roque, Pedro	CA	IAC-18.D1.6.7
Rosa, Paulo	A	IAC-18.C1.5.10
Rosales-Alpizar, Luis Carlos	CA	IAC-18.B4.1.4
Rosciano, Elisa	CA	IAC-18.B2.8-GTS.3.1
Rosenberg, Daniel	CA	IAC-18.C4.1.6
Rosenberg, Daniel	A	IAC-18.A3.2A.5
Roshanian, Jafar	CA	IAC-18.D4.IP.2
Rosius, Philippe	CA	IAC-18.B2.5.1
Rossello, Vittorio	CA	IAC-18.B2.3.8
Rossello, Vittorio	CA	IAC-18.B2.6.3
Rossello, Vittorio	CA	IAC-18.B5.3.8
Rossi, Alessandro	CA	IAC-18.A6.2.10
Rossi, Alessandro	A	IAC-18.A6.4.6
Rossi, Alessandro	CA	IAC-18.A6.3.7
Rossi, Alessio	A	IAC-18.E3.IP.12
Rossi, Angelo Pio	A	IAC-18.A3.1.12
Rossi, Angelo Pio	CA	IAC-18.A3.IP.51
ROSSI, Carole	CA	IAC-18.C4.10.13
Rossi, Francesca	CA	IAC-18.D3.3.7
Rossmanith, Gregor	CA	IAC-18.B6.2.10
Rossmann, Juergen	CA	IAC-18.D1.IP.6
Rossodivita, Angela	CA	IAC-18.C4.4.8
Rossodivita, Angela	CA	IAC-18.C4.6.6
Rossodivita, Angela	CA	IAC-18.D2.8-A5.4.7
Rothe, Daniel	CA	IAC-18.D6.1.9
Rothery, David	CA	IAC-18.A3.1.12
Rothschild, Lynn	CA	IAC-18.D3.2.4
Rothschild, Lynn	CA	IAC-18.A3.2C.6
Rothschild, Lynn	CA	IAC-18.A2.7.12
Rothschild, Lynn	CA	IAC-18.C2.9.12
Rothschild, Lynn	CA	IAC-18.D4.5.10
Rotteveel, Jeroen	CA	IAC-18.B1.1.6
Roussos, Elias	CA	IAC-18.A7.3.3
Roux, Christophe	CA	IAC-18.C1.5.3
Roux, Gabriël	A	IAC-18.E2.1.1
Rowe, Brinkley	CA	IAC-18.E7.2.5
Rowe-Setz, Josie	CA	IAC-18.E3.3.6
Rowley, John	CA	IAC-18.E3.4.7
Roy, Aimee	A	IAC-18.E1.1.9
Roy-Guay, David	CA	IAC-18.E1.IP.23
Royer, Fabien	CA	IAC-18.B4.2.7
Royle, Samuel	CA	IAC-18.A3.5.11
Rozanov, Vladimir V.	CA	IAC-18.B1.3.7
Rozemeijer, Mark	CA	IAC-18.D2.5.12
Ruan, Haibing	CA	IAC-18.A6.9.2
Rubin, Philip	CA	IAC-18.A2.7.15
Rucker, Michelle	CA	IAC-18.A3.1.3
Rudas, Csilla	CA	IAC-18.A1.5.11
Rudoi, Ivan A.	CA	IAC-18.C2.8.6
Rudolph, Andreas	A	IAC-18.B6.3.1
Rudy, Richard	CA	IAC-18.A6.1.5
Rudys, Saulius	CA	IAC-18.B2.7.7
Rueda Carazo, Alberto	CA	IAC-18.E3.1.5
Ruedl, Rebecca	CA	IAC-18.A1.2.23
Ruf, Christopher	CA	IAC-18.B4.4.10
Ruf, Oliver	CA	IAC-18.D1.1.9
Ruffer, Michael	CA	IAC-18.A3.4B.6
Rufino, Giancarlo	CA	IAC-18.C1.3.5
Rufino, Giancarlo	CA	IAC-18.A6.5.8
Rufino, Giancarlo	CA	IAC-18.B4.7.11
Rufo, Damiano	CA	IAC-18.C2.6.5
Rugescu, Radu	A	IAC-18.E4.3A.5
Rughani, Rahul	CA	IAC-18.D1.5.8
Ruiz, Xavier	CA	IAC-18.B5.1.11
Ruiz, Xavier	CA	IAC-18.A2.2.8
Ruiz, Xavier	CA	IAC-18.A2.4.5
Rukavishnikov, Ilya	CA	IAC-18.A1.2.6
Rukavishnikov, Ilya	A	IAC-18.A1.2.29
Rum, Giovanni	CA	IAC-18.E3.1.3
Rundfeldt, Lea	A	IAC-18.A1.4.12
Rundfeldt, Lea	A	IAC-18.A1.4.21
Runte, Torben	CA	IAC-18.C2.3.10
Rusanov, Vasily	A	IAC-18.A1.2.3
Rusconi, Andrea	CA	IAC-18.A3.2B.2
Rusconi, Andrea	CA	IAC-18.A3.3B.1
Rush Bakalyar, Lauren	CA	IAC-18.B3.4-B6.4.6
Russell, Ray	CA	IAC-18.A6.1.5
Russell, Ryan P.	CA	IAC-18.C1.9.13
Russo, Aloisia	CA	IAC-18.E5.5.3
Russo, Antonio	CA	IAC-18.C1.5.10
Rutczynska, Aleksandra	CA	IAC-18.A1.5.10
Rutherford, Kimberly	CA	IAC-18.B4.4.6
Ruttley, Tara	CA	IAC-18.B3.3.1
Ruttley, Tara	CA	IAC-18.B3.3.3
Ryan, Eileen	CA	IAC-18.A6.10-C1.7.1
Ryan, William	CA	IAC-18.A6.10-C1.7.1
Ryazanskiy, Sergey	CA	IAC-18.A1.2.6
Rybus, Tomasz	CA	IAC-18.A6.6.10
Rykova, Marina	CA	IAC-18.A1.4.14
Rysak, Damian	CA	IAC-18.A6.5.9
Ryszawa, Ewelina	A	IAC-18.C2.IP.6
Ryszawa, Ewelina	CA	IAC-18.A3.5.3
Ryu, Youngsuk	CA	IAC-18.C4.IP.22
Rösch, Christian	CA	IAC-18.A1.3.18
Rößler, Mario	CA	IAC-18.B2.IP.21
Rückerl, Sebastian	A	IAC-18.B2.2.2
Rüede, Anne-Marlene	A	IAC-18.A5.2.7
Rüede, Anne-Marlene	A	IAC-18.A3.IP.44

S

Name	Role	Paper
S, Rajapandian	CA	IAC-18.C4.5.4
S S, AZEEMSHA	A	IAC-18.C2.IP.23
Sabath, Dieter	CA	IAC-18.A6.3.5
Sabath, Dieter	CA	IAC-18.B3.4-B6.4.2
Sabath, Dieter	CA	IAC-18.B3.4-B6.4.3
Sabatini, Marco	CA	IAC-18.B2.1.11
Sabatini, Marco	CA	IAC-18.C2.2.6
Sabatini, Marco	CA	IAC-18.C2.3.9
Sabatini, Marco	A	IAC-18.C1.4.11
Sabatini, Marco	CA	IAC-18.C1.IP.8
Sabatini, Marco	A	IAC-18.D1.6.11
Saccani, Luciano	CA	IAC-18.D2.4.7
Saccoccia, Giorgio	CA	IAC-18.D1.4A.7
Saccoccia, Giorgio	CA	IAC-18.C4.6.6
Saccoccia, Giorgio	CA	IAC-18.D2.8-A5.4.7
Saccoccia, Giorgio	CA	IAC-18.D2.8-A5.4.10
Saccoccia, Giorgio	CA	IAC-18.C4.8-B4.5A.7
Sachdev, Tej	CA	IAC-18.A3.3A.5
Sadasivan, Subramaniam	CA	IAC-18.A4.1.11
Sadhu, Sai Ram	A	IAC-18.B2.2.6
Sadova, Anastasiya	CA	IAC-18.A1.4.14
Saenger, Ingo	A	IAC-18.D3.3.12
Saetta, Alessandro	A	IAC-18.B1.IP.22
Saganti, Premkumar	A	IAC-18.A1.5.9
Sagath, Daniel	A	IAC-18.E3.1.9
Sagath, Daniel	A	IAC-18.E6.3.4
Saget, Jeremy	A	IAC-18.A1.4.3
Sagliano, Marco	CA	IAC-18.C1.6.10
Sagliano, Marco	A	IAC-18.D2.5.9
Sagliano, Marco	CA	IAC-18.D2.6.1
Sagner, Reinhard	CA	IAC-18.E4.2.5
Sagnieres, Luc	A	IAC-18.A6.9.5
Sahli, Philipp	CA	IAC-18.E2.3-GTS.4.1
Sahli, Philipp	CA	IAC-18.A2.IP.15
Sahoo, Shalini	A	IAC-18.E5.IP.7
Sahu, Nishad	CA	IAC-18.D1.2.8
Saienko, Ivan	CA	IAC-18.B2.3.6
Saiga, Shohei	CA	IAC-18.C4.2.7
SAINI, SOHIT	A	IAC-18.D1.2.10
SAINI, SOHIT	CA	IAC-18.D1.IP.14
Saisho, Daisuke	A	IAC-18.E7.3.9
Saisutjarit, Phongsatorn	CA	IAC-18.B4.8.15
Saito, Hirobumi	CA	IAC-18.C3.4.6
Saito, Tamaki	CA	IAC-18.A1.1.6
Sakagami, Ryo	CA	IAC-18.D4.2.8
Sakai, Shin-ichiro	CA	IAC-18.C1.5.8
Sakamoto, Hiraku	CA	IAC-18.C2.5.2
Sakamoto, Katsuya	A	IAC-18.C1.6.8
Sako, Nobutada	A	IAC-18.B4.4.4
Sakovsky, Maria	CA	IAC-18.B4.2.7
Sakraker, Isil	CA	IAC-18.B4.6A.12
Salama, Farid	CA	IAC-18.A1.6.3
Salama, Farid	CA	IAC-18.A1.6.8
Salamon, Nick	A	IAC-18.C4.7-C3.5.3
Salamon, Nick	CA	IAC-18.C4.7-C3.5.10
Salanova, Michele	CA	IAC-18.A1.8.3
Salatti, Mario	CA	IAC-18.A7.3.1
Salazar Lopez, Francisco Eduardo	CA	IAC-18.B4.4.5
Salcedo, Laura Marcela	A	IAC-18.E7.IP.24
Salces, Adrian	A	IAC-18.B4.6B.7
Salem Condory, Behnam	A	IAC-18.E7.3.10
Salfi, Abaid Ullah	CA	IAC-18.B2.3.10
SALICRUP, CARLOS	CA	IAC-18.B3.5.6
Salmane, Anete	CA	IAC-18.E5.1.7
Salmeri, Antonino	A	IAC-18.E7.1.16
Salmon, Thierry	CA	IAC-18.A6.5.1
Salosina, Margarita	CA	IAC-18.C2.4.10
Salotti, Jean-Marc	A	IAC-18.A5.2.3
Salteri, Efstratia	CA	IAC-18.A5.1.9
Salvatore, Vito	CA	IAC-18.C4.4.14
Salvatore, Vito	CA	IAC-18.C4.5.7
Salvi, Samuele	CA	IAC-18.C1.5.10
Salvioli, Federico	CA	IAC-18.B6.3.6
Samad, Yarjan Abdul	CA	IAC-18.C2.8.5
Samburov, Sergey	A	IAC-18.E1.7.5
Samburski, Guy	A	IAC-18.A2.7.4
Samoil, Katie	CA	IAC-18.E1.IP.32
Sampson, Melissa	A	IAC-18.D2.4.10
Sampson, Melissa	A	IAC-18.A3.IP.62
Sams, Hans Hubert	CA	IAC-18.B1.3.6
Samson, Victoria	A	IAC-18.E3.4.2
San-Juan, Juan Félix	A	IAC-18.C1.1.2
San-Martín, Montserrat	CA	IAC-18.C1.1.2
Sanchez, Javier	A	IAC-18.C1.IP.29
Sanchez, Joan Pau	CA	IAC-18.B1.2.12
Sanchez Cebrian, Alberto	CA	IAC-18.D2.5.4
Sanchez Cuartielles, Joan Pau	CA	IAC-18.C1.1.4
Sanchez Cuartielles, Joan Pau	CA	IAC-18.E2.3-GTS.4.5
Sanchez Cuartielles, Joan Pau	CA	IAC-18.E2.3-GTS.4.11
Sanchez Cuartielles, Joan Pau	CA	IAC-18.C1.8.8
Sanchez Cuartielles, Joan Pau	CA	IAC-18.C1.9.9
Sanchez Gamez, Miguel Angel	A	IAC-18.E1.IP.26
Sandalinas, Jordi	A	IAC-18.A4.IP.8
Sandalinas, Jordi	A	IAC-18.B5.3.2
Sandau, Rainer	CA	IAC-18.B4.9-GTS.5.1
Sanders, Brian T.	CA	IAC-18.B4.9-GTS.5.8
Sanders, Michael	CA	IAC-18.A4.IP.3
Sang, Bernhard	CA	IAC-18.B1.2.8
SANJEEVIRAJA, THANGAVEL	A	IAC-18.A1.5.12
Sanjurjo, Manuel	CA	IAC-18.A6.9.9
Sano, Naruhisa	CA	IAC-18.B4.5.2
Sansegundo Chamarro, Manuel	CA	IAC-18.C1.IP.33
Santa Cruz Leal, Ulices	CA	IAC-18.C1.6.1
Santacesaria, Vincenzo	CA	IAC-18.B1.4.7
Santeramo, Daniele Antonio	CA	IAC-18.E2.1.7
Santeramo, Daniele Antonio	A	IAC-18.A6.IP.41
SANTHANA GOPAL, VENKATASAMY	A	IAC-18.B4.5.7
Santiago Perez, Jose	CA	IAC-18.C4.6.4
Santilli, Giancarlo	A	IAC-18.B1.5.8
Santilllan- Gutierrez, Saul	A	IAC-18.E1.5.14
Santin, Giovanni	CA	IAC-18.A1.5.2
Santo, Loredana	CA	IAC-18.D1.1.3
Santoni, Fabio	CA	IAC-18.A6.1.8
Santoni, Fabio	CA	IAC-18.B4.1.8
Santoni, Fabio	CA	IAC-18.E1.3.7
Santoni, Fabio	CA	IAC-18.B2.3.5
Santoni, Fabio	CA	IAC-18.A6.9.8
Santoni, Fabio	CA	IAC-18.A1.6.9
Santoni, Fabio	CA	IAC-18.A6.IP.4
Santoni, Fabio	CA	IAC-18.A6.IP.22
Santoni, Fabio	CA	IAC-18.C2.IP.19
Santoni, Fabio	CA	IAC-18.A6.10-C1.7.9
Santoni, Fabio	CA	IAC-18.B4.6B.10
Santoni, Fabio	CA	IAC-18.B2.7.4
Santoni, Fabio	CA	IAC-18.C2.8.1
Santonicola, M. Gabriella	CA	IAC-18.C2.6.5
Santonicola, M. Gabriella	A	IAC-18.C2.6.6
Santoro, Francesco	CA	IAC-18.D1.4A.12
Santoro, Francesco	A	IAC-18.D6.3.4
Santos, Nuno Andre	CA	IAC-18.A6.6.10

Santos, Nuno Andre	CA	IAC-18.D1.6.10
Santra, Shreya	CA	IAC-18.B2.8-GTS.3.12
Sanyal, Jai	A	IAC-18.E7.IP.11
Sanz, Kerry	CA	IAC-18.A3.2A.3
Saotome, Osamu	CA	IAC-18.C2.2.5
Sapone, Rosa	A	IAC-18.B3.4-B6.4.5
Sapone, Rosa	CA	IAC-18.B3.7.7
Sarafin, Michael	A	IAC-18.B3.1.7
Sarah, Maria-Gabriella	A	IAC-18.E3.1.2
SARAH, Maria-Gabriella	CA	IAC-18.E3.6.7
Sarda, Karan	A	IAC-18.B4.4.1
Sarego, Giulia	CA	IAC-18.A6.3.9
Sarelli, Anastasia	CA	IAC-18.B1.IP.36
Sarkar, Pratik	CA	IAC-18.D6.3.1
Sarli, Bruno	CA	IAC-18.E2.1.2
Sarli, Bruno	A	IAC-18.C1.9.5
Sarno, Salvatore	CA	IAC-18.D1.3.3
Sarno, Salvatore	A	IAC-18.C1.6.12
Sarno, Salvatore	CA	IAC-18.B4.7.11
Sarret, Martin	CA	IAC-18.B4.5.4
Sarret, Martin	A	IAC-18.E3.4.7
SASAHARA, Shin-ichiro	A	IAC-18.A1.1.6
Sasaki, Atsushi	CA	IAC-18.C1.IP.9
Sasaki, Kaname	CA	IAC-18.C2.1.7
Sasaki, Kaname	CA	IAC-18.A3.4A.2
Sasaki, Kaname	CA	IAC-18.C3.4.3
Sasaki, Kaname	CA	IAC-18.A3.4B.6
Sasaki, Kenji	CA	IAC-18.C3.2.8
Sasaki, Masanori	CA	IAC-18.C1.8.1
Sasibhushan, Rakesh	CA	IAC-18.B2.2.4
Sathiaraj, Amanda Michelle Simran	CA	IAC-18.E5.4.6
Sato, Akihiro	A	IAC-18.D2.1.7
Sato, Shoji	CA	IAC-18.D4.3.10
Sato, Shunsuke	CA	IAC-18.C1.9.10
Sato, Tatsuro	CA	IAC-18.D4.3.10
Sato, Tsumori	CA	IAC-18.B4.5.2
Sato, Yuji	CA	IAC-18.C2.7.5
Satoh, Masahiko	A	IAC-18.E3.5-E7.6.3
Satoh, Naoki	CA	IAC-18.A3.1.1
Satoh, Naoki	CA	IAC-18.A3.1.10
Satou, Yasutaka	CA	IAC-18.D1.2.4
Satpathy, Sagar	A	IAC-18.D2.IP.13
Sauer, Moritz	CA	IAC-18.E2.3-GTS.4.1
Saunders, Chris	CA	IAC-18.B4.6A.1
Saunders, Christopher	A	IAC-18.A3.2A.10
Saunders, Christopher	A	IAC-18.B4.5.13
Sauro, Francesco	CA	IAC-18.A5.1.12
Saveko, Alina	CA	IAC-18.A1.2.6
Savelyeva, Mila	A	IAC-18.D2.1.9
Savelyeva, Mila	A	IAC-18.D2.2.7
Savelyeva, Mila	A	IAC-18.D2.3.3
Savinkina, Alexandra	CA	IAC-18.A1.2.9
Savinkov, Vasily	CA	IAC-18.B3.3.3
Savino, Raffaele	CA	IAC-18.A6.4.4
Savino, Raffaele	CA	IAC-18.C2.4.4
Savino, Raffaele	CA	IAC-18.C4.3.6
Savino, Raffaele	CA	IAC-18.A2.3.9
Savioli, Livia	CA	IAC-18.A6.1.8
Sawada, Hirotaka	CA	IAC-18.A3.1.10
Saxena, Vertika	CA	IAC-18.A5.IP.8
Sayin, Alp	CA	IAC-18.B1.3.10
Scala, Antonio	CA	IAC-18.A1.3.10
Scalisi, Stefano	CA	IAC-18.C2.1.11
Scalzi, Davide	CA	IAC-18.C4.8-B4.5A.2
Scannapieco, Antonio Fulvio	CA	IAC-18.B2.IP.20
Scannapieco, Antonio Fulvio	A	IAC-18.C1.IP.20
Scarpa, Giannicola	CA	IAC-18.A7.3.12
Scatena, Lorenzo	CA	IAC-18.B5.1.4
Scatena, Lorenzo	CA	IAC-18.B5.2.7
Schaaf, Kaitlin	CA	IAC-18.D1.1.6
Schaible, Evelyn	CA	IAC-18.B4.1.10
Schalt, Adriane	CA	IAC-18.A1.4.21
Schanz, Thomas	CA	IAC-18.A7.3.7
Scharlemann, Carsten	A	IAC-18.B4.3.3
Scharlemann, Carsten	CA	IAC-18.C4.5.3
Scharnagl, Julian	CA	IAC-18.C1.6.1
Schastlivtseva, Daria	A	IAC-18.A1.IP.14
Schaub, Hanspeter	CA	IAC-18.C1.4.3
Schaub, Hanspeter	CA	IAC-18.C1.6.2
Schaub, Hanspeter	CA	IAC-18.A6.IP.31
Schaub, Hanspeter	CA	IAC-18.A6.10-C1.7.6
Schaufelberger, David	CA	IAC-18.D3.3.10
Schaus, Volker	CA	IAC-18.A6.4.6
Scheeres, Daniel	CA	IAC-18.C1.1.8
Scheeres, Daniel	CA	IAC-18.C1.5.2
Scheeres, Daniel	CA	IAC-18.A6.10-C1.7.1
Scheeres, Daniel	CA	IAC-18.C1.9.8
Schenk, Mark	CA	IAC-18.A6.5.2
Scheper, Marc	A	IAC-18.D5.3.1
Scher, Mitchell	A	IAC-18.E7.7-B3.8.10
Scherer, Maximilian	CA	IAC-18.A5.1.5
Scherer, Maximilian	CA	IAC-18.E3.IP.13
Scherfgen, David	CA	IAC-18.A1.8.4
Schervan, Thomas A.	A	IAC-18.C2.1.8
Schervan, Thomas A.	CA	IAC-18.E6.1.4
Schettino, Giulia	CA	IAC-18.A6.4.6
Schiaffino, Marco	CA	IAC-18.A6.1.9
Schiaffino, Marco	CA	IAC-18.A6.IP.10
Schiattarella, Vincenzo	CA	IAC-18.D1.3.6
Schilde, Carsten	CA	IAC-18.A3.2C.5
Schildknecht, Thomas	CA	IAC-18.A6.1.3
Schildknecht, Thomas	CA	IAC-18.A6.1.6
Schildknecht, Thomas	CA	IAC-18.A6.9.7
Schildknecht, Thomas	CA	IAC-18.A6.9.10
Schildknecht, Thomas	CA	IAC-18.A6.IP.6
Schildknecht, Thomas	CA	IAC-18.A6.IP.21
Schildknecht, Thomas	CA	IAC-18.A6.10-C1.7.2
Schill, Kerstin	CA	IAC-18.A3.5.7
Schiller, Daniel	CA	IAC-18.D5.2.6
Schiller, Daniel	CA	IAC-18.E1.5.11
Schiller, Daniel	CA	IAC-18.D1.4A.11
Schiller, Daniel	A	IAC-18.D1.5.3
Schilling, Herbert	CA	IAC-18.D4.1.1
Schilling, Klaus	CA	IAC-18.D1.1.9
Schilling, Klaus	CA	IAC-18.B4.3.12
Schilling, Klaus	CA	IAC-18.C1.6.1
Schilling, Klaus	A	IAC-18.E1.IP.34
Schilling, Klaus	CA	IAC-18.B2.6.8
Schilling, Klaus	CA	IAC-18.C4.8-B4.5A.4
Schilling, Klaus	A	IAC-18.D1.6.1
Schillirò, Francesco	A	IAC-18.A4.1.6
Schillirò, Francesco	CA	IAC-18.A4.1.9
Schillirò, Francesco	CA	IAC-18.A4.1.11
Schimmerohn, Martin	CA	IAC-18.A6.3.5
Schimmerohn, Martin	CA	IAC-18.C2.5.11
Schkolnik, Vladimir	CA	IAC-18.A2.1.9
Schlacht, Irene Lia	A	IAC-18.B3.9-GTS.2.11
Schlacht, Irene Lia	CA	IAC-18.A1.IP.4
Schlacht, Irene Lia	CA	IAC-18.A3.IP.69
Schlacht, Irene Lia	CA	IAC-18.B3.7.14
Schlechten, Jonathan	CA	IAC-18.A3.2C.6
Schlechtriem, Stefan	CA	IAC-18.D2.7.5
Schlegel, Hans	CA	IAC-18.B3.9-GTS.2.2
Schlegelmilch, Barret	A	IAC-18.D5.1.2
Schlegelmilch, Barret	CA	IAC-18.A3.IP.7
Schlegelmilch, Barret	CA	IAC-18.B6.2.5
Schleich, Wolfgang	CA	IAC-18.A2.1.13
Schleich, Wolfgang	CA	IAC-18.A2.IP.7
Schleppi, Juergen	A	IAC-18.A3.IP.5
Schleutker, Thorn	CA	IAC-18.A6.2.5
Schleutker, Thorn	CA	IAC-18.A6.4.6
Schlosser, Karoly	CA	IAC-18.B3.9-GTS.2.10
Schluse, Michael	CA	IAC-18.D1.IP.6
Schlutz, Juergen	A	IAC-18.E3.2.5
Schmalz, Sergei	CA	IAC-18.A6.IP.1
Schmid, Alexander	A	IAC-18.B1.2.5
Schmid, Heiko	A	IAC-18.E5.3.5
Schmid, Volker	A	IAC-18.B3.3.7
Schmid, Volker	CA	IAC-18.B3.7.8
Schmidt, Alexander	A	IAC-18.A2.5.4
Schmidt, George	A	IAC-18.C4.4.1
Schmidt, Marco	A	IAC-18.B1.4.13
Schmidt, Michael	CA	IAC-18.B3.6-A5.3.3
Schmidt, Nikola	A	IAC-18.D3.1.10
Schmidt, Uwe	CA	IAC-18.B2.IP.21
Schmierer, Christian	A	IAC-18.D2.7.5
Schmitt, Christoph	CA	IAC-18.B3.IP.9
Schmitt, Dirk-Roger	A	IAC-18.B2.5.4
Schmitt, Dirk-Roger	A	IAC-18.D6.3.9
Schmitt, Felix	CA	IAC-18.D3.3.10
Schmitz, Burkhard	CA	IAC-18.A2.3.6
Schmitz, Burkhard	CA	IAC-18.A1.8.9
Schmitz, Nicole	CA	IAC-18.A3.4B.6
Schneider, Alexander	CA	IAC-18.B2.1.2
Schneider, Maximilian	CA	IAC-18.E2.3-GTS.4.1
Schneider, Stephan	CA	IAC-18.A2.6.11
Schneller, Manfred	CA	IAC-18.A6.10-C1.7.7
Schnepper, Klaus	CA	IAC-18.C1.5.12
Schnitzer, Israel	CA	IAC-18.C4.1.6
Schnitzer, Israel	CA	IAC-18.A3.2A.5
Schoen, Andreas	CA	IAC-18.B3.3.3
Scholz, Artur	A	IAC-18.B4.3.9
Schonenborg, Rogier	CA	IAC-18.A3.1.10
Schraml, Marcel	A	IAC-18.A2.4.4
Schreiber, Andreas	CA	IAC-18.D1.4B.8
Schreier, Gunter	CA	IAC-18.B1.4.2
Schroeder, Jan Walter	A	IAC-18.D4.5.18
Schrogl, Kai-Uwe	CA	IAC-18.A3.1.5
Schrogl, Kai-Uwe	A	IAC-18.E7.IP.5
Schrogl, Kai-Uwe	CA	IAC-18.E7.7-B3.8.11
Schröder, Kai-Uwe	CA	IAC-18.C2.1.8
Schröder, Kai-Uwe	CA	IAC-18.D1.2.12
Schröder, Kai-Uwe	CA	IAC-18.E6.1.4
Schröder, Silvio	A	IAC-18.A3.IP.59
Schröder, Silvio	CA	IAC-18.A3.4B.2
Schröder, Valerie	A	IAC-18.B3.6-A5.3.2
Schubert, Daniel	A	IAC-18.A1.IP.4
Schubert, Daniel	CA	IAC-18.B3.7.14
Schubert, Martin	A	IAC-18.C2.5.13
Schuet, Stefan	CA	IAC-18.A6.10-C1.7.5
Schuette, Andreas	A	IAC-18.A2.5.5
Schuff, Herbert	CA	IAC-18.B2.1.1
Schuh, Florian	A	IAC-18.B2.IP.21
Schuldt, Thilo	A	IAC-18.A2.1.7
Schuldt, Thilo	CA	IAC-18.A2.1.9
Schulien, Philipp	CA	IAC-18.B3.7.8
Schulman, Howard	CA	IAC-18.C4.7-C3.5.3
Schulman, Howard	CA	IAC-18.C4.7-C3.5.10
Schulte, Peter	A	IAC-18.C1.5.11
Schultz, Johannes	CA	IAC-18.B1.2.11
Schultz, Johannes	CA	IAC-18.E1.2.1
Schulz, Herbert	CA	IAC-18.A2.7.11
Schulze-Varnholt, Dirk	CA	IAC-18.B3.1.2
Schumann, Sandra	A	IAC-18.A2.6.11
Schummer, Florian	CA	IAC-18.B2.2.2
Schummer, Florian	CA	IAC-18.D5.1.11
Schuster, Martin	CA	IAC-18.A3.2A.8
Schwalber, Ameli	CA	IAC-18.B4.2.2
Schwalber, Ameli	CA	IAC-18.C4.6.4
Schwarting, Verena	CA	IAC-18.A3.5.7
Schwartz, Mariah	CA	IAC-18.A2.7.13
Schwarz, Egbert	A	IAC-18.B1.4.12
Schwarz, Michael	CA	IAC-18.B3.IP.9
Schwarz, René	CA	IAC-18.D2.5.9
Schwarz, René	CA	IAC-18.D2.6.1
Schwarz, Tobias	CA	IAC-18.B4.3.13
Schwehm, Gerhard	A	IAC-18.E4.3A.4
Schweigert, Robin	CA	IAC-18.E2.3-GTS.4.1
Schwenk, Kurt	CA	IAC-18.B4.6A.8
Schwentenwein, Martin	CA	IAC-18.C4.5.3
Schwinning, Marius	A	IAC-18.A5.IP.6
Schywek, Mathias	CA	IAC-18.A2.IP.8
Schäfer, Frank	CA	IAC-18.A6.3.5
Schäfer, Hannes	A	IAC-18.C2.IP.12
Schätzle, Simon	CA	IAC-18.B3.6-A5.3.5
Schütte, Alexander	A	IAC-18.C2.1.6
Schütte, Andreas	CA	IAC-18.A1.8.9
Sciarra, Marcello	A	IAC-18.E2.1.7
Scimemi, Sam	A	IAC-18.B3.2.3
Sciortino, Giacomo Primo	A	IAC-18.E3.3.4
Sciortino, Giacomo Primo	A	IAC-18.E1.5.9
Sciortino, Giacomo Primo	A	IAC-18.E5.2.1
Scipioni, Manuele	A	IAC-18.D1.2.9
Scire, Gioacchino	CA	IAC-18.A6.IP.11
Sciti, Diletta	CA	IAC-18.C2.4.4
Sciti, Diletta	CA	IAC-18.C4.3.6
Scortecci, Fabrizio	CA	IAC-18.C4.IP.53
Scott, Dennis	A	IAC-18.D2.8-A5.4.5
Seabra, João	CA	IAC-18.A3.3B.7
Searle, Tim	CA	IAC-18.D2.7.8
Seboldt, Wolfgang	CA	IAC-18.B3.9-GTS.2.2
Seboldt, Wolfgang	CA	IAC-18.A3.4B.6
Secara, Teodora	A	IAC-18.E6.IP.1
Sedykh, Oleg	CA	IAC-18.A3.3A.3
Seefeldt, Patric	A	IAC-18.C2.1.7
Seefeldt, Patric	CA	IAC-18.A6.5.3
Seefeldt, Patric	CA	IAC-18.C3.4.3
Seefeldt, Patric	CA	IAC-18.A3.4B.6
Seelbinder, David	CA	IAC-18.C1.6.10
Seelig, Torsten	CA	IAC-18.A2.4.8
Seffinga, Vincent	A	IAC-18.E7.1.14
Sefton-Nash, Elliot	CA	IAC-18.A3.2B.2
Segelke, Harald	CA	IAC-18.C2.3.1
Segert, Tom	A	IAC-18.B4.7.12
Segura Hernandez, Francisco Javier	CA	IAC-18.B4.4.5
Seibezeder, Julia	CA	IAC-18.A7.2.6
Seidel, Achim	CA	IAC-18.A3.2B.8
Seidel, Andre	CA	IAC-18.C4.IP.48
Seifert, Bernhard	CA	IAC-18.B4.3.3
Seiichi, Shimizu	CA	IAC-18.C2.3.6
Seimetz, Lars	CA	IAC-18.C2.1.5
Seine, Ruediger	CA	IAC-18.B3.5.1
Seitz, Bernd	CA	IAC-18.C1.IP.25
Seitzer, Patrick	CA	IAC-18.A6.10-C1.7.9
Seitzer, Patrick	CA	IAC-18.B4.6B.10
Seitzer, Patrick	CA	IAC-18.B2.7.4
Selg, Fabian	CA	IAC-18.E1.2.1
Selig, Hanns	CA	IAC-18.A2.1.2
Selig, Hanns	A	IAC-18.A2.5.3
Selivanov, Arnold	CA	IAC-18.B4.6B.3
Selivanov, Mikhail	CA	IAC-18.C4.4.4
Sellers, Jerry	A	IAC-18.D1.4A.1
Sellers, Jerry	CA	IAC-18.D1.4B.2
Selvanathan, Irene	CA	IAC-18.D5.3.7
Selvi D, Beulah Deva	CA	IAC-18.C4.5.4
Semenikhin, Sergey	CA	IAC-18.C4.4.11
Semenzato, Andrea	CA	IAC-18.A3.1.12
Semke, Berend	CA	IAC-18.B6.IP.1
Semones, Edward J.	CA	IAC-18.A1.5.10
Semwal, Kritesh	CA	IAC-18.B6.1.3
Seo, Jung-gi	CA	IAC-18.C2.7.10
Seo, Kaito	CA	IAC-18.D4.2.8
Sephton, Mark	CA	IAC-18.A1.6.8
Sephton, Mark	CA	IAC-18.A3.5.11
Serikov, Vitaly	CA	IAC-18.E4.1.10
Serman, Matteo	CA	IAC-18.D2.5.12
Serra, Jean-Jacques	A	IAC-18.E4.2.9
Serra, Pedro Arroz	CA	IAC-18.D1.6.10
Serra, Romain	A	IAC-18.C1.IP.32
Serrano, Daniel	A	IAC-18.C1.IP.38
Serrano, Daniel	CA	IAC-18.A7.3.2
Serrano Baza, César Augusto	CA	IAC-18.D3.1.6
Servuli, Ekaterina	CA	IAC-18.A1.4.14
Setiawan, Muhammad Nanda	CA	IAC-18.C2.IP.25
Seurig, Roland	CA	IAC-18.B3.7.4
Seyedmadani, Kimia	CA	IAC-18.A3.IP.48
Seyedzamani, Soheil	CA	IAC-18.D1.4A.9
Sgambati, Antonella	CA	IAC-18.D2.4.7
Sgambati, Antonella	A	IAC-18.D3.3.7
Sgambati, Antonella	A	IAC-18.A1.6.2

Sgambati, Antonella	A	IAC-18.A1.IP.17
Sgambati, Antonella	CA	IAC-18.C2.9.9
Sgobbo, Riccardo	A	IAC-18.C2.3.4
Shaevich, Sergey K.	CA	IAC-18.B3.4-B6.4.12
Shah, Neerav	CA	IAC-18.A7.3.9
Shah Khadri, Syed Peer Mohamed	CA	IAC-18.D2.2.10
Shahid, Kam	CA	IAC-18.D1.5.1
Shakil, Zaid	A	IAC-18.E1.IP.28
Shalimova, Ekateryna	CA	IAC-18.A3.IP.50
Shams, Javad	A	IAC-18.D4.IP.2
Shamsul, Aqeel	CA	IAC-18.D4.2.8
Shang, Xiaopeng	A	IAC-18.D2.2.2
SHAO, Zhijiang	CA	IAC-18.D2.IP.5
Shapovalov, Anatoly	CA	IAC-18.C2.IP.16
Shar, Manny	A	IAC-18.D3.1.9
Shar, Manny	CA	IAC-18.E6.2.1
Sharf, Inna	CA	IAC-18.A6.9.5
SHARMA, ABHIJITH	CA	IAC-18.E2.4.10
Sharma, Abhishek	A	IAC-18.C4.5.9
Sharma, Abhishek	A	IAC-18.C4.10.2
Sharma, Monika	A	IAC-18.A7.IP.1
Sharma, Monika	CA	IAC-18.C4.6.11
Sharma, Monika	CA	IAC-18.B4.7.5
Sharma, Shubham	CA	IAC-18.D1.2.8
Sharma, Vikrant	A	IAC-18.D4.IP.9
Shastri, Saurav K	A	IAC-18.E2.4.7
Shaw, Aaron	CA	IAC-18.A5.1.5
Shaw, Niamh	CA	IAC-18.E1.4.2
Shaw, Niamh	CA	IAC-18.A5.1.10
Shaw, Niamh	CA	IAC-18.E1.9.10
Shawe, James Joseph	CA	IAC-18.E2.3-GTS.4.11
Shcheglov, Georgy	A	IAC-18.E1.3.11
Shcheglov, Georgy	CA	IAC-18.A6.IP.45
Shearer, Nathaniel	A	IAC-18.B2.8-GTS.3.3
Shearer, Nathaniel	CA	IAC-18.B2.8-GTS.3.11
Sheehan, J.P.	CA	IAC-18.B4.2.9
Shehryar, Usman	A	IAC-18.B2.7.6
Shekoofa, Omid	A	IAC-18.C3.1.9
Shekoofa, Omid	CA	IAC-18.E5.4.5
Shelfer, Tad	CA	IAC-18.A1.5.10
Shembel, Elena	A	IAC-18.C2.8.9
Shen, Bo	CA	IAC-18.D2.5.8
Shen, Bo	CA	IAC-18.D4.IP.11
Shen, Lin	CA	IAC-18.D4.IP.11
Sher, Bilal	CA	IAC-18.D1.1.6
Shergill, Satinder	A	IAC-18.A3.IP.33
Shergill, Satinder	A	IAC-18.E1.2.5
Sherwood, Brent	A	IAC-18.A3.1.6
Shestakov, Sergey	CA	IAC-18.C1.2.4
Shestakov, Sergey	CA	IAC-18.C1.4.7
Shevtsova, Valentina	A	IAC-18.A2.2.1
Shi, Fashu	A	IAC-18.C4.1.9
Shi, Xiaobo	CA	IAC-18.C4.IP.36
Shi, Xiaobo	CA	IAC-18.C4.IP.37
SHICHANG, LIANG	CA	IAC-18.A6.IP.17
Shilton, Mark	CA	IAC-18.D1.IP.27
Shima, Takeya	CA	IAC-18.C2.3.6
Shimada, Toru	CA	IAC-18.C4.2.7
Shimada, Toru	CA	IAC-18.C4.2.11
Shimizu, Toshiro	CA	IAC-18.A3.IP.29
Shintani, Mihoko	A	IAC-18.E7.3.7
Shiono, Mitsuhiro	CA	IAC-18.C3.2.7
Shiota, Ichiro	CA	IAC-18.A6.3.2
Shirakawa, Masaki	CA	IAC-18.B3.3.3
Shirakawa, Masaki	CA	IAC-18.B3.3.6
Shirasaka, Seiko	CA	IAC-18.C3.4.6
Shireman, Kirk	A	IAC-18.A5.1.2
Shires Nakamura, Tobi	CA	IAC-18.E2.3-GTS.4.10
Shirin-zade, Alchin	A	IAC-18.B5.3.6
Shirobokov, Maksim	CA	IAC-18.C1.8.10
Shitanda, Isao	CA	IAC-18.D1.3.10
Shitara, Shoichi	CA	IAC-18.C2.2.2
Shruti, Keeni	CA	IAC-18.A3.2C.9
Shtark, Tomer	A	IAC-18.B2.5.8
Shuai, Liu	CA	IAC-18.A6.IP.38
Shukla, Vivek	CA	IAC-18.C2.IP.23
Shurshakov, Vyacheslav	CA	IAC-18.A1.5.11
Shved, Dmitry	CA	IAC-18.A1.1.10
Shved, Dmitry	CA	IAC-18.A1.1.11
Shyam, Vikram	CA	IAC-18.D4.1.1
Shypko, Olexiy	A	IAC-18.E8.1.1
Siddiqi, Afreen	CA	IAC-18.B1.1.2
Sidlo, Katarzyna	CA	IAC-18.E1.6.10
Sidney, Wayne	A	IAC-18.D3.3.1
Sidorenko, Vladislav	A	IAC-18.A6.IP.28
Sieder-Katzmann, Jan	CA	IAC-18.C4.5.16
Sieder-Katzmann, Jan	CA	IAC-18.C4.10.4
Siedorf, Martin	CA	IAC-18.E2.3-GTS.4.1
Siegl, Martin	A	IAC-18.B1.3.5
Siemion, Andrew	CA	IAC-18.A4.1.9
Sierk, Bernd	CA	IAC-18.B1.2.7
Sierra, Victor	CA	IAC-18.E2.3-GTS.4.11
Sigmund, Jerry	A	IAC-18.E1.6.11
Sijbers, Jan	CA	IAC-18.A1.2.14
Silha, Jiri	A	IAC-18.A6.IP.6
Silva, Ana Claudia	A	IAC-18.D1.4A.4
Silva, Pedro Freire	CA	IAC-18.C1.5.10
Silva-Martinez, Jackelynne	CA	IAC-18.E5.1.13
Silva-Martinez, Jackelynne	CA	IAC-18.B3.4-B6.4.6
Silvestrini, Stefano	CA	IAC-18.B6.3.7
Silvestroni, Laura	CA	IAC-18.C2.4.4
Sim, Chae Kyung	CA	IAC-18.A3.IP.53
Simanovskii, Ilya	A	IAC-18.A2.4.7
Simard, Benoit	CA	IAC-18.C2.4.3
Simeoni, Francesco	CA	IAC-18.C1.IP.30
Simha, Harsha	CA	IAC-18.B4.2.7
Siminski, Jan	CA	IAC-18.A6.IP.34
Simmons, Kevin	CA	IAC-18.A2.IP.3
Simoes, Marlini	CA	IAC-18.A6.IP.37
Simon Olmos, Maria Jose	CA	IAC-18.B5.1.11
SIMONTACCHI, Pamela	A	IAC-18.C4.1.2
Simpson, Jeffery	CA	IAC-18.C2.9.7
Simpson, Michael	A	IAC-18.E3.4.4
Singh, Anand Kumar	CA	IAC-18.A4.IP.4
Singh, Anand Kumar	CA	IAC-18.D4.4.8
Singh, Anand Kumar	CA	IAC-18.A4.2.6
Singh, Nisheet	CA	IAC-18.D4.4.13
Singh, Nisheet	A	IAC-18.D4.4.14
Singh, Nisheet	CA	IAC-18.D4.5.18
Singh, Sheldon	CA	IAC-18.A1.3.5
Singha, Suman	CA	IAC-18.B1.5.4
Singhal, Aman	CA	IAC-18.A5.2.14
Singhal, Aman	CA	IAC-18.A3.IP.12
Singla, Puneet	CA	IAC-18.A6.9.6
Singroha, Navjeet	CA	IAC-18.D4.IP.9
Sinha, Shruti	CA	IAC-18.B1.3.9
Sinn, Thomas	A	IAC-18.C2.2.4
Sinn, Thomas	A	IAC-18.A6.5.3
Sinn, Thomas	CA	IAC-18.B2.7.10
Sinnema, Gerben	A	IAC-18.C2.4.1
Sipa, Szymon	CA	IAC-18.B5.1.9
Sippel, Martin	CA	IAC-18.D2.4.1
Sippel, Martin	A	IAC-18.D2.4.4
Sippel, Martin	CA	IAC-18.D2.6.1
Siraj, Aimal	A	IAC-18.B4.7.8
Sirek, Adam	A	IAC-18.E1.IP.32
Sirenko, Volodymyr	CA	IAC-18.C2.7.6
Sirigu, Stefano	CA	IAC-18.B3.4-B6.4.5
Sirobhushanam, Anuhya	A	IAC-18.C3.1.3
Sirobhushanam, Anuhya	CA	IAC-18.A4.2.11
Sirons, Nikita	CA	IAC-18.D2.6.5
Sitepu, Elioenai	A	IAC-18.E2.3-GTS.4.5
Sitepu, Elioenai	A	IAC-18.B4.8.10
Sitnikova, Anna	CA	IAC-18.E5.3.8
Sitnikova, Anna	CA	IAC-18.E5.IP.4
Skalden, Jonathan	CA	IAC-18.B4.6A.12
Skalden, Jonathan	CA	IAC-18.A5.IP.6
Skauen, Andreas Nordmo	CA	IAC-18.B4.4.2
Skinner, Mark A.	A	IAC-18.A6.1.5
Skobelev, Petr	CA	IAC-18.D4.5.5
Skoog, Ake Ingemar	A	IAC-18.E4.2.1
Skoog, Ake Ingemar	CA	IAC-18.E4.2.4
Skoulidou, Despoina	CA	IAC-18.A6.4.6
Skryleva, Evgeniya	A	IAC-18.A2.2.4
Skrypnyk, Ilja	CA	IAC-18.D5.3.7
Skyrpnyk, Ilja	CA	IAC-18.D1.IP.17
Slane, Frederick A.	CA	IAC-18.D1.5.8
Slenzka, Klaus	A	IAC-18.A1.6.4
Slenzka, Klaus	A	IAC-18.A1.6.7
Slenzka, Klaus	A	IAC-18.A1.7.3
Slenzka, Klaus	CA	IAC-18.A2.7.5
Sloan, John	A	IAC-18.D6.1.5
Smal, Evan	CA	IAC-18.A3.2B.9
Smestad, Tore	CA	IAC-18.B4.4.2
Smink, Douglas	CA	IAC-18.A1.3.5
Smirnov, Nickolay N.	CA	IAC-18.A2.IP.1
Smirnov, Nickolay N.	A	IAC-18.A2.IP.11
Smirnov, Yuri	CA	IAC-18.A1.3.20
Smirnov, Yuri	CA	IAC-18.A2.IP.5
Smirnov, Yuri	CA	IAC-18.A1.7.8
Smisek, Michal	CA	IAC-18.D1.2.7
Smith, Alan	CA	IAC-18.E3.2.1
Smith, Craig	CA	IAC-18.A6.6.3
Smith, Isaac	CA	IAC-18.D3.3.1
Smith, Katharine	CA	IAC-18.B4.2.2
Smith, Katharine	CA	IAC-18.C4.6.4
Smith, Lauren	A	IAC-18.D3.3.4
Smith, Lesley Jane	CA	IAC-18.A6.6.4
Smith, Lesley Jane	CA	IAC-18.A6.8.2
Smith, Mary Kate	CA	IAC-18.B3.4-B6.4.6
Smith, Matthew W.	CA	IAC-18.B4.3.4
Smith, Milton	A	IAC-18.E7.2.3
SMORALDI, Antonio	CA	IAC-18.A5.2.11
Smuclerova, Martina	A	IAC-18.E7.4.4
Snidal, Mark	A	IAC-18.D2.IP.10
Snidal, Mark	CA	IAC-18.C2.9.7
Snyder, Gregory	CA	IAC-18.B1.2.10
Snyder, Jessica	CA	IAC-18.A3.2C.6
Snyder, Jessica	A	IAC-18.C2.9.12
Snyder, Jessica	CA	IAC-18.D4.5.10
Soares, Tiago	CA	IAC-18.A6.2.3
Soares, Tiago	CA	IAC-18.D5.2.5
Soares, Tiago	CA	IAC-18.A6.6.2
Sobczak, Kamil	CA	IAC-18.C4.3.12
Sobiesiak, Ludwik	CA	IAC-18.A7.3.2
SOEDJARWO, MOEDJI	CA	IAC-18.C2.IP.24
Soellner, Wolfgang	A	IAC-18.A2.6.10
Soenmez, Alev	CA	IAC-18.C3.IP.3
Sofrony Esmeral, Jorge Ivan	CA	IAC-18.E1.3.5
Sofrony Esmeral, Jorge Ivan	CA	IAC-18.E5.1.12
Soga, Ryota	CA	IAC-18.C2.4.5
Soken, Halil Ersin	A	IAC-18.C1.5.8
Sokhin, Igor G.	CA	IAC-18.B3.5.3
Sokolova, Olga	A	IAC-18.D4.2.8
Sokolovskaya, Alisa	A	IAC-18.A1.8.18
Solano, Kendrick	CA	IAC-18.A2.7.11
Soller, Sebastian	A	IAC-18.C4.10.11
Solorzano, Elias	A	IAC-18.A3.IP.55
Solovyeva, Lilia	CA	IAC-18.C4.6.3
Soma, Eriko	CA	IAC-18.A6.3.2
Somerhausen, André	CA	IAC-18.B3.4-B6.4.10
Somma, Gian Luigi	A	IAC-18.A6.4.8
Sommariva, Andrea	A	IAC-18.E3.2.11
Sommer, Bernd	CA	IAC-18.B3.6-A5.3.3
Sommer, Stefan	CA	IAC-18.A3.2A.8
Sommer, Stefan	CA	IAC-18.A1.6.12
Sommermann, Daniel	CA	IAC-18.A2.4.4
Sone, Yoshitsugu	A	IAC-18.D3.2.1
Sone, Yoshitsugu	CA	IAC-18.C3.3.6
Song, Guangming	A	IAC-18.A6.3.1
Song, Junling	CA	IAC-18.C4.9.11
Song, Junling	A	IAC-18.C4.IP.15
Song, Qiang	CA	IAC-18.A6.IP.20
Song, Shixiong	A	IAC-18.C4.IP.56
Song, Zhengyu	CA	IAC-18.D2.IP.5
Sonnadara, Sanju	CA	IAC-18.E1.4.7
Sonsalla, Roland U.	CA	IAC-18.D4.1.3
Sonza Reorda, Matteo	CA	IAC-18.D1.1.1
Sood, Samaksh	A	IAC-18.E3.IP.14
Soosaar, Reimo	CA	IAC-18.B1.3.6
Sora, Ludovico	CA	IAC-18.A1.8.2
Sorathiya, Rakesh	CA	IAC-18.C3.IP.3
Sorge, Marlon	A	IAC-18.A6.2.11
Sorge, Marlon	CA	IAC-18.A6.4.3
Sorge, Marlon	CA	IAC-18.A6.7.6
Sorgenfrei, Tina	A	IAC-18.A2.2.11
Sorgenfrei, Tina	A	IAC-18.A2.2.17
Soria Salinas, Álvaro Tomás	A	IAC-18.A2.3.7
Soria Salinas, Álvaro Tomás	A	IAC-18.A3.IP.41
Sorokin, Igor V.	CA	IAC-18.B3.3.3
Sorokin, Vladimir	CA	IAC-18.B3.5.3
Sorribes-Palmer, Félix	CA	IAC-18.C2.1.5
Sosnina, Inna	CA	IAC-18.A1.2.6
Sotnichek, Nikolai	CA	IAC-18.B2.3.6
Soucek, Alexander	A	IAC-18.E7.4.6
Soukup, Michael	CA	IAC-18.B4.4.7
Soundararajan, Balaji	CA	IAC-18.E2.3-GTS.4.9
Souvannavong, Fabrice	CA	IAC-18.D1.2.7
Soysal, Medeni	CA	IAC-18.E3.1.3
Spaans, Marco	CA	IAC-18.A1.6.8
Spassova, Simona	A	IAC-18.E7.5.7
Speaks, Seth	CA	IAC-18.A6.2.9
Spencer, David	CA	IAC-18.C1.5.11
Spencer, David B.	A	IAC-18.E1.6.1
Spencer, David B.	CA	IAC-18.A6.9.6
Spencer, David B.	CA	IAC-18.C1.IP.31
Spencer, Henry	CA	IAC-18.B4.8.8
Spencer, Victor	CA	IAC-18.B3.4-B6.4.12
Speretta, Stefano	CA	IAC-18.A3.2A.7
Speretta, Stefano	CA	IAC-18.B1.IP.22
Speretta, Stefano	CA	IAC-18.B4.6B.5
Speretta, Stefano	CA	IAC-18.B4.8.5
Sperl, Matthias	A	IAC-18.A2.2.13
Sperl, Matthias	CA	IAC-18.E5.1.6
Sperl, Matthias	CA	IAC-18.A3.2C.3
Sperl, Matthias	CA	IAC-18.A3.2C.4
Spiecker, Joachim	CA	IAC-18.D1.1.1
Spietz, Peter	CA	IAC-18.C3.4.3
Spietz, Peter	CA	IAC-18.A3.4B.6
Spiller, Dario	CA	IAC-18.D1.3.6
Spiller, Dario	A	IAC-18.C1.IP.19
Spina, Francesco	A	IAC-18.D4.2.13
Spina, Francesco	CA	IAC-18.A3.2C.6
Spina, Robert	CA	IAC-18.B4.4.8
Spina, Robert	CA	IAC-18.C4.8-B4.5A.12
Spirito, Germana	CA	IAC-18.E7.IP.20
Spitta, Luis Fernando	CA	IAC-18.A1.5.7
Spitzbart, Manfred	CA	IAC-18.C4.5.3
Spitzer, Arnon	A	IAC-18.B4.3.14
Spohn, Tilman	CA	IAC-18.A3.5.3
Spoto, Francois	CA	IAC-18.A3.3A.3
Sproewitz, Tom	A	IAC-18.C2.1.10
Sproewitz, Tom	A	IAC-18.C3.4.3
Sproll, Fabian	CA	IAC-18.B6.1.8
Sproule, Ben	CA	IAC-18.E1.7.13
Spröwitz, Tom	CA	IAC-18.C2.1.7
Spröwitz, Tom	CA	IAC-18.A6.5.3
Spröwitz, Tom	CA	IAC-18.A3.4B.6
Spydevold, Ivar	CA	IAC-18.B4.4.2
Spörl, Andreas	CA	IAC-18.A6.10-C1.7.7
Spörl, Andreas	CA	IAC-18.B6.2.10
Sreeram, G C	CA	IAC-18.B5.2.3
Srinivasan, Dipak	CA	IAC-18.D1.4B.4
Srivastava, Anand	CA	IAC-18.B2.1.10
Srivastava, Pulak	CA	IAC-18.C4.6.11
SSY, Ganesh	CA	IAC-18.B1.IP.8
St-Pierre, Luc	CA	IAC-18.E3.1.3
St-Pierre, Luc	CA	IAC-18.B3.3.2
St-Pierre, Luc	CA	IAC-18.B1.5.2

Stahn, Alexander Christoph	A	IAC-18.A1.1.7
Stahn, Alexander Christoph	CA	IAC-18.A1.1.8
Stahn, Alexander Christoph	CA	IAC-18.A1.2.10
Stahn, Alexander Christoph	CA	IAC-18.A1.2.11
Stahn, Alexander Christoph	A	IAC-18.A1.2.13
Stahn, Alexander Christoph	CA	IAC-18.A1.2.24
Stahn, Alexander Christoph	CA	IAC-18.A1.4.4
Stahn, Alexander Christoph	CA	IAC-18.A1.4.6
Stahn, Alexander Christoph	A	IAC-18.A1.4.19
Stakkestad, Kjell	CA	IAC-18.A5.2.2
Stam, D. M.	CA	IAC-18.B3.7.13
Stamat, Liviu	CA	IAC-18.E2.3-GTS.4.9
Stamov, Lyuben	CA	IAC-18.A2.4.2
Stamov, Lyuben	CA	IAC-18.A2.IP.1
Stanley, Thomas	CA	IAC-18.B1.6-GTS.1.3
Stannarius, Ralf	CA	IAC-18.A2.2.12
Stanton, Duncan	CA	IAC-18.B1.1.6
Stanzione, Vincenzo	A	IAC-18.B4.9-GTS.5.11
Stappert, Sven	CA	IAC-18.D2.4.1
Stappert, Sven	CA	IAC-18.D2.4.4
Stappert, Sven	CA	IAC-18.D2.6.1
Starinova, Olga	A	IAC-18.C1.IP.36
Stark, Anton	A	IAC-18.C4.5.6
Starke, Mario	CA	IAC-18.B4.6A.4
Starke, Mario	A	IAC-18.B4.7.3
Staudinger, Emanuel	CA	IAC-18.A3.2A.8
Staško, Martin	CA	IAC-18.E3.1.4
Stecklein, Jonette	CA	IAC-18.A3.1.3
Stedron, Bohumir	CA	IAC-18.A5.IP.5
Steffen, Rolfes	CA	IAC-18.C4.2.8
Steffens, Michael	CA	IAC-18.C2.6.3
Steffens, Michael	CA	IAC-18.D5.3.2
Stefoudi, Dimitra	A	IAC-18.E7.5.9
Stefoudi, Dimitra	CA	IAC-18.E7.5.18
Steier, Frank	A	IAC-18.C2.3.10
Steimle, Christian	CA	IAC-18.C2.3.4
Steimle, Christian	A	IAC-18.B3.4-B6.4.7
Steinach, Mathias	CA	IAC-18.A1.2.10
Steinach, Mathias	CA	IAC-18.A1.4.4
Steinach, Mathias	CA	IAC-18.A1.4.12
Steinach, Mathias	CA	IAC-18.A1.4.21
Steinberg, Fabian	A	IAC-18.A1.4.20
Steinpilz, Tobias	CA	IAC-18.A2.3.13
Steinpilz, Tobias	A	IAC-18.A2.IP.8
Steinpilz, Tobias	CA	IAC-18.A2.7.8
Stella, Cristiano	CA	IAC-18.B1.IP.3
Stelmakh-Drescher, Olga	A	IAC-18.E7.7-B3.8.13
Stelwagen, Frank	A	IAC-18.B4.6A.11
Stelzer, Beate	CA	IAC-18.A7.3.7
Stelzer, Martin	CA	IAC-18.B4.6A.8
Stenuit, Hilde	A	IAC-18.B3.3.11
Stenuit, Hilde	A	IAC-18.E1.2.3
Stenzel, Christian	CA	IAC-18.A3.2B.8
Stenzel, Christian	A	IAC-18.A3.IP.36
Stepanova, Anastasia	CA	IAC-18.A1.1.12
Stepanova, Anastasia	A	IAC-18.A5.2.13
Stepanova, Daria	CA	IAC-18.A1.IP.15
Stepanova, Daria	A	IAC-18.D1.IP.17
Stepanyants, Viktor	CA	IAC-18.A6.7.5
STEPHANE, GRES	A	IAC-18.A5.IP.1
Stephanova, Daria	CA	IAC-18.D5.3.7
Stern, Claudia	CA	IAC-18.A1.IP.3
Stern, Oliver	CA	IAC-18.D1.IP.6
Sternberg, David	CA	IAC-18.B4.8.4
Sternke, Tammo	A	IAC-18.A2.1.11
Stesina, Fabrizio	CA	IAC-18.B4.6B.13
Stesina, Fabrizio	A	IAC-18.C4.8-B4.5A.7
Stettner, Armin	CA	IAC-18.A1.6.2
Stettner, Armin	CA	IAC-18.B3.7.4
Stevenin, Hervé	CA	IAC-18.A5.1.12
Stevenson, Thomas	CA	IAC-18.A7.3.8
Stevenson Soler Chisabas, Roy	A	IAC-18.C2.7.7
Stewart, Brian	CA	IAC-18.B4.3.5
Stewart, Brian	CA	IAC-18.A6.5.2
Stewart, Brian	CA	IAC-18.C3.4.5
Steyn, Willem	CA	IAC-18.A6.5.1
Steyn, Willem (Herman)	CA	IAC-18.E2.1.1
Stiles, Amanda	CA	IAC-18.B4.5.1
Stitt, David	CA	IAC-18.E1.1.4
Stitt, David	CA	IAC-18.E1.2.6
Stober, Javier	CA	IAC-18.E5.2.4
Stober, Javier	CA	IAC-18.B1.6-GTS.1.2
Stochaj, Steven	CA	IAC-18.A7.3.9
Stocklin, Frank	CA	IAC-18.B2.1.5
Stodieck, Louis	CA	IAC-18.A2.7.14
Stodieck, Louis	CA	IAC-18.A2.7.15
Stoeffler, Christoph	CA	IAC-18.D1.6.5
STOIA-DJESKA, Marius	CA	IAC-18.D2.IP.14
Stoica, Adrian	A	IAC-18.A3.IP.27
Stoica, Adrian-Mihail	CA	IAC-18.C1.5.10
Stokes, Hedley	CA	IAC-18.A6.4.6
Stokes, Hedley	CA	IAC-18.A6.3.7
Stokes, Hedley	A	IAC-18.A6.IP.19
Stokes, Hedley	CA	IAC-18.A6.6.4
Stolarski, Marcin	CA	IAC-18.B5.1.9
Stolfi, Angelo	A	IAC-18.C2.2.6
Stoll, Enrico	CA	IAC-18.A6.2.6
Stoll, Enrico	CA	IAC-18.A3.2B.11
Stoll, Enrico	CA	IAC-18.A6.4.6
Stoll, Enrico	CA	IAC-18.C2.5.4
Stoll, Enrico	CA	IAC-18.C3.3.7
Stoll, Enrico	CA	IAC-18.D1.IP.20
Stoll, Enrico	CA	IAC-18.A6.6.8
Stoll, Enrico	CA	IAC-18.A3.2C.5
Stoll, Norbert	CA	IAC-18.A2.7.13
Stoll, Regina	CA	IAC-18.A2.7.13
Stolz, Boris	CA	IAC-18.D3.3.10
Stoneback, Russell	CA	IAC-18.B4.2.9
Stoop, Esmee	CA	IAC-18.A7.2.6
Storch, Tobias	CA	IAC-18.B1.4.2
Storesund, Frode	CA	IAC-18.B4.4.2
Stotler, Charles	A	IAC-18.A6.8.1
Stove, Andrew	CA	IAC-18.B1.3.10
Strain, Andrew	CA	IAC-18.B4.9-GTS.5.9
Stras, Luke	CA	IAC-18.A3.2B.6
Strasser, Nina	CA	IAC-18.A6.1.7
Straube, Ulrich	CA	IAC-18.A1.5.10
Strauch, Hans	CA	IAC-18.D1.6.10
Strecker, Alexander	CA	IAC-18.B1.IP.3
Streltsov, Arthur	CA	IAC-18.A6.7.5
Strimbu, Zachary	CA	IAC-18.C4.7-C3.5.3
Strimbu, Zachary	A	IAC-18.C4.7-C3.5.10
Strippoli, Luigi	CA	IAC-18.C1.IP.38
Strippoli, Luigi	A	IAC-18.A7.3.2
Strizzi, Jon	CA	IAC-18.D2.1.6
Strizzi, Jon	CA	IAC-18.D2.IP.3
Strobl, Christian	CA	IAC-18.B1.4.2
Stroe, Ion	CA	IAC-18.E4.1.9
Stromberger, Peter	CA	IAC-18.A2.1.11
Stroud, Colin	CA	IAC-18.A3.3A.5
Strádi, Andrea	CA	IAC-18.A1.5.11
Strádi, Andrea	CA	IAC-18.E1.IP.3
Stuart, Jeffrey	A	IAC-18.C1.8.12
Stubbe, Peter	CA	IAC-18.E3.2.5
Stubbe, Peter	CA	IAC-18.E3.4.9
Stuffler, Timo	CA	IAC-18.D2.4.7
Stuffler, Timo	CA	IAC-18.B3.7.4
Sturz, Laszlo	A	IAC-18.A2.3.3
Stute, Andreas	CA	IAC-18.B1.3.4
Stürzl, Wolfgang	CA	IAC-18.A3.2A.8
Suard, Noah	CA	IAC-18.D2.5.12
Suatoni, Matteo	CA	IAC-18.C1.5.5
Suatoni, Matteo	CA	IAC-18.A3.4A.7
Suatoni, Matteo	A	IAC-18.D1.IP.27
Sudakov, Vladimir	A	IAC-18.E4.1.10
Suedfeld, Peter	CA	IAC-18.A1.1.2
Suedfeld, Peter	CA	IAC-18.A1.1.3
Suer, Murat	CA	IAC-18.E1.4.9
Suess, Ruediger	A	IAC-18.E3.6.10
Sugawara, Yoshiki	CA	IAC-18.D1.2.4
Sugaya, Mami	CA	IAC-18.D4.2.13
Sugihara El Maghraby, Ahmed Kiyoshi	A	IAC-18.B1.IP.31
Sugiyama, Yuichi	CA	IAC-18.B2.IP.9
Suk-Udom, Sara	CA	IAC-18.E1.4.7
Sulaiman Nur Ubay, Muhammad	A	IAC-18.C3.IP.4
Sullivan, Alex	CA	IAC-18.E2.4.2
Summerer, Leopold	CA	IAC-18.A1.IP.34
Summerer, Leopold	CA	IAC-18.C3.4.10
Sun, Benjamin	CA	IAC-18.D3.3.10
SUN, Binglei	A	IAC-18.B4.7.7
Sun, Chong	CA	IAC-18.A6.IP.42
Sun, Gongling	CA	IAC-18.D4.4.13
Sun, Gongling	CA	IAC-18.D4.4.14
Sun, Jun	CA	IAC-18.B2.IP.3
Sun, Lingli	CA	IAC-18.E5.2.3
Sun, Qingxiao	CA	IAC-18.C3.3.10
Sun, Qingxiao	CA	IAC-18.C3.IP.9
Sun, Rong	A	IAC-18.B5.3.4
Sun, Ting	A	IAC-18.B4.6A.7
Sun, Yeqing	A	IAC-18.A1.5.8
Sun, Yue	CA	IAC-18.A6.IP.25
Sun, Yueqiang	CA	IAC-18.A1.5.8
Sun, Yukun	CA	IAC-18.A3.4B.7
Sunaert, Stefan	CA	IAC-18.A1.2.14
Sunakawa, Hideo	CA	IAC-18.C4.IP.8
Sunarya, Rachmat	CA	IAC-18.B1.1.13
Sundahl, Mark	A	IAC-18.E7.2.1
Sundaramoorthy, Prem	CA	IAC-18.A3.2A.7
Sundaramoorthy, Prem	CA	IAC-18.D3.2.11
Sundaramoorthy, Prem	A	IAC-18.B4.8.5
Sundhar, Abhinav	CA	IAC-18.D1.2.8
Suneela, TJVD	CA	IAC-18.B1.3.9
Sunesara, Amanul	CA	IAC-18.C2.4.3
Supolkina, Natalya	CA	IAC-18.A1.1.10
Supolkina, Natalya	CA	IAC-18.A1.1.11
Sureda, Miquel	CA	IAC-18.B4.2.2
Sureda, Miquel	CA	IAC-18.C4.6.4
Surmacz, Pawel	A	IAC-18.C4.3.12
Surmacz, Pawel	A	IAC-18.C4.IP.9
Surmacz, Pawel	CA	IAC-18.D2.9-D6.2.11
Sust, Manfred	CA	IAC-18.B2.5.6
Suvorov, Alexander	CA	IAC-18.A1.4.9
Suvorov, Maksim	CA	IAC-18.C4.IP.34
Suzuki, Hideyuki	CA	IAC-18.E1.3.2
Suzuki, Yuto	CA	IAC-18.A3.IP.29
Svenes, Knut	CA	IAC-18.B4.4.2
Svitak, Andy	CA	IAC-18.B2.1.5
Swan, Peter	A	IAC-18.D4.3.1
Sweeting, Martin	CA	IAC-18.A3.2A.10
Sweeting, Martin	CA	IAC-18.B4.5.13
Sweeting, Sir Martin	CA	IAC-18.B4.6A.1
Switzer, Eric	CA	IAC-18.A7.3.8
Sykas, Dimitris	A	IAC-18.B1.IP.36
Sylvestre-Baron, Annick	CA	IAC-18.A3.3B.5
Szabó, Julianna	CA	IAC-18.A1.5.11
Szczepinski, Piotr	CA	IAC-18.D2.IP.9
Szczepinski, Piotr	CA	IAC-18.D2.9-D6.2.10
Szemerey, Istvan	CA	IAC-18.A7.3.3
Szendrei, Daniel	A	IAC-18.E1.IP.3
Szewczyk, Roman	CA	IAC-18.A6.6.6
Szlawski, Alicia	CA	IAC-18.E1.4.7
Sznajder, Maciej	CA	IAC-18.C2.1.7
Sznajder, Maciej	CA	IAC-18.A6.5.3
Sznajder, Maciej	CA	IAC-18.C3.4.3
Sáez-Vásquez, Julio	CA	IAC-18.A2.7.17
Sánchez Maestro, Raúl	CA	IAC-18.C1.IP.38
Sánchez Olmos, Mariano	CA	IAC-18.E2.3-GTS.4.9
Sánchez Pérez, Jose Manuel	CA	IAC-18.A3.5.10
Sébastien, Vourc'h	A	IAC-18.A6.IP.35
Söderholm, Stefan	CA	IAC-18.D1.1.1
Söllner, Gerd	A	IAC-18.B3.4-B6.4.2
Sütterlin, Robert	A	IAC-18.A2.6.7
Sütterlin, Saskia	CA	IAC-18.E2.3-GTS.4.1

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Name	Role	Paper
Tabacco, Paolo	CA	IAC-18.D1.3.3
Tabarah, Edward	CA	IAC-18.B3.1.3
TABASSUM, FARHANA	CA	IAC-18.D1.2.10
TABASSUM, FARHANA	A	IAC-18.D1.IP.14
Tafoya Vargas, Juan Salvador	A	IAC-18.D1.3.13
Taguchi, Seijiro	CA	IAC-18.A2.2.3
Taguchi, Tatsuya	A	IAC-18.A2.IP.9
Taguchi, Tatsuya	CA	IAC-18.A2.7.7
Taheran, Mahsa	CA	IAC-18.D1.4A.9
TAHIR, ANDI MUKHTAR	CA	IAC-18.C2.IP.24
Tailhades, Sebastien	A	IAC-18.B1.IP.33
Tailhades, Sebastien	CA	IAC-18.B4.9-GTS.5.5
Tajima, Hiroyasu	CA	IAC-18.B4.2.4
Tajino, Junichi	A	IAC-18.A1.2.17
Tajmar, Martin	A	IAC-18.C4.4.15
Tajmar, Martin	CA	IAC-18.C4.5.16
Tajmar, Martin	A	IAC-18.C4.7-C3.5.5
Tajmar, Martin	CA	IAC-18.C4.10.4
Takahara, Osamu	A	IAC-18.C2.3.6
Takahashi, Tsukasa	CA	IAC-18.A1.1.6
Takala, Mika	CA	IAC-18.B4.8.9
Takano, Tadashi	CA	IAC-18.B3.2.7
Takano, Tadashi	A	IAC-18.C3.2.7
Takao, Yuki	CA	IAC-18.C1.6.8
Takaya-Umehara, Yuri	A	IAC-18.E7.5.10
Takaya-Umehara, Yuri	A	IAC-18.E7.7-B3.8.5
Takemura, Kazutoshi	CA	IAC-18.C1.9.10
TAKESHITA, Atsuya	A	IAC-18.D4.4.10
Takeuchi, Yu	CA	IAC-18.E3.1.14
Takla, Mina	A	IAC-18.A5.1.9
Talon, Thibaud	CA	IAC-18.B4.2.7
TAMAKOSHI, Chihiro	CA	IAC-18.D3.IP.1
Tamura, Gou	A	IAC-18.B2.IP.9
Tamura, Takashi	CA	IAC-18.C4.3.3
Tan, Ernest	CA	IAC-18.B3.4-B6.4.11
Tan, Khai Pang	A	IAC-18.B2.2.10
Tan, Longyu	A	IAC-18.B2.IP.3
Tan, Shujun	CA	IAC-18.C2.3.12
Tan, Xiaomin	CA	IAC-18.B1.IP.12
Tan, Yonghua	CA	IAC-18.C4.10.3
Tanabe, Yoshichika	A	IAC-18.D2.2.1
Tanaka, Koji	CA	IAC-18.C3.2.8
Tanaka, Koji	CA	IAC-18.A6.3.2
Tanaka, Koji	A	IAC-18.C3.4.6
Tanaka, Kunihiko	CA	IAC-18.A1.2.16
Tanaka, Kunihiko	CA	IAC-18.A1.3.2
Tanaka, Naohiro	CA	IAC-18.C3.2.8
Tanaka, Toshiki	A	IAC-18.A3.2C.9
Tanaka, Yu	CA	IAC-18.C1.9.10
Tanaka, Yuri	A	IAC-18.E5.3.10
Tang, Jingshi	CA	IAC-18.C1.2.9
Tang, Jingshi	CA	IAC-18.D2.3.9
Tang, Jingshi	A	IAC-18.B2.5.10
Tang, Lei	CA	IAC-18.A6.IP.27
TANG, Min	CA	IAC-18.C4.IP.56
Tang, Ping	CA	IAC-18.C2.9.13
Tang, Qian	CA	IAC-18.A6.IP.25
Tang, Saili	CA	IAC-18.E5.2.3
Tang, Xiaobin	CA	IAC-18.A4.1.8
Tani, Yasuhiro	CA	IAC-18.C4.2.7
Tani, Yasuhiro	CA	IAC-18.D2.5.5
Tani Hatakenaka, Mizuki	A	IAC-18.E7.IP.4
Taniguchi, Chise	A	IAC-18.D1.6.2
Taniguchi, Daisuke	A	IAC-18.E1.1.8
Tanima, Momoko	CA	IAC-18.A1.2.17
Tank, Jens	CA	IAC-18.A1.2.1
Tank, Jens	CA	IAC-18.A1.2.2
Tank, Jens	CA	IAC-18.A1.2.4
Tank, Jens	CA	IAC-18.A1.2.5
Tanner, Daniel	CA	IAC-18.A5.1.5
Tanouchi, Hiroaki	CA	IAC-18.D2.2.1
Tao, Yangzi	A	IAC-18.E7.1.11
Tao, Yangzi	A	IAC-18.D4.5.9

Tao, Zhang	A	IAC-18.A2.5.12
Tao, Zhang	CA	IAC-18.A1.8.15
Tapio, Jenni	CA	IAC-18.E7.4.6
Taraba, Michael	CA	IAC-18.B4.3.3
Tarabini-Castellani, Lorenzo	CA	IAC-18.D2.5.2
Targonski, John	CA	IAC-18.C4.5.10
Targonski, John	CA	IAC-18.C4.IP.38
Tartaglia, Angelo	A	IAC-18.A7.2.10
Tarzi, Zahi	CA	IAC-18.C1.9.7
Tasaki, Kazuyuki	CA	IAC-18.B3.3.6
Tasso de Figueirido Soussa, Joao	CA	IAC-18.B5.2.13
Tatiossian, Pascal	CA	IAC-18.D2.6.3
Tatlı, Yağız Alp	CA	IAC-18.E1.IP.24
Tatnall, Adrian	CA	IAC-18.B1.IP.31
Tatsukawa, Tomoaki	CA	IAC-18.E1.3.2
Taverner, Morgan	A	IAC-18.A1.6.6
Tawara, Kyosuke	CA	IAC-18.C1.9.10
Taylor, Ben	A	IAC-18.B4.3.5
Taylor, Ben	CA	IAC-18.E2.4.1
Taylor, Ben	CA	IAC-18.A6.5.1
Taylor, Ben	CA	IAC-18.A6.5.2
Taylor, Ben	CA	IAC-18.C3.4.5
Taylor, Graeme	A	IAC-18.B4.9-GTS.5.8
Taylor, Zachary	CA	IAC-18.E5.1.3
te Hennepe, Frank	CA	IAC-18.B2.5.6
te Hennepe, Frank	CA	IAC-18.D1.IP.1
Team, HORYU-IV	CA	IAC-18.D5.3.4
Team, MAIUS	CA	IAC-18.A2.1.8
Team, MAIUS	CA	IAC-18.A2.3.5
Teeney, Leo	CA	IAC-18.A3.2C.6
Teiser, Jens	CA	IAC-18.A2.3.13
Teiser, Jens	CA	IAC-18.A2.IP.8
Teiser, Jens	CA	IAC-18.A2.7.8
Teixeira, Pedro	CA	IAC-18.C2.2.9
Teja, Ravi	CA	IAC-18.E1.4.7
Tekinalp, Ozan	CA	IAC-18.E1.4.9
Telaar, Juergen	CA	IAC-18.A6.6.10
Telaar, Juergen	CA	IAC-18.D1.6.10
Temidayo Isaiah, Oniosun	A	IAC-18.B4.1.7
Temidayo Isaiah, Oniosun	A	IAC-18.E1.5.7
Temidayo Isaiah, Oniosun	A	IAC-18.E5.4.2
Temidayo Isaiah, Oniosun	CA	IAC-18.B1.IP.25
Temidayo Isaiah, Oniosun	CA	IAC-18.E1.2.2
Tenenbaum, Stepan	CA	IAC-18.E2.4.8
Teng, Huiping	CA	IAC-18.C2.4.9
Tennen, Leslie I.	A	IAC-18.A4.2.1
Teofilatto, Paolo	CA	IAC-18.C1.1.10
Teofili, Lorenzo	CA	IAC-18.A5.1.6
Tepper, Eytan	A	IAC-18.E7.7-B3.8.12
Tepper, Sebastian	A	IAC-18.E1.IP.21
Terada, Yuri	CA	IAC-18.C2.5.2
Terashima, Chiaki	CA	IAC-18.D1.3.10
Terui, Fuyuto	CA	IAC-18.C1.6.8
Terzibaschian, Thomas	CA	IAC-18.A6.10-C1.7.7
Teselkin, Sergei Fedorovich	A	IAC-18.A3.5.2
Teske, Jan	A	IAC-18.A2.1.10
Teslyuk, Marta	CA	IAC-18.E1.4.7
Testa, Davide	CA	IAC-18.D3.IP.7
Tetlow, Matthew	CA	IAC-18.B4.2.5
Tetuko Sri Sumantyo, Josaphat	CA	IAC-18.B4.4.9
Teves, Lucy	CA	IAC-18.A1.3.17
Texier, Delphine	CA	IAC-18.E6.3.7
Teye Matey, Ernest	A	IAC-18.E1.1.11
Thaller, Michelle	CA	IAC-18.E1.1.4
Thaller, Michelle	CA	IAC-18.E1.2.6
Thallner, Manfred	A	IAC-18.E5.1.10
Tham, Dung	A	IAC-18.D3.3.6
Thananjeyan, Akshaya	CA	IAC-18.E1.4.7
Theanthong, Paritat	CA	IAC-18.E1.2.8
Theys, Andreas	CA	IAC-18.D1.1.2
Thibeault, Sheila	CA	IAC-18.C2.6.2
Thiel, Cora S.	A	IAC-18.A1.8.6
Thiel, Cora S.	CA	IAC-18.A1.8.14
Thiel, Markus	A	IAC-18.C2.9.5
Thiel, Markus	A	IAC-18.D1.6.4
Thiel, Tobias	A	IAC-18.B2.6.8
Thiele-Eich, Insa	CA	IAC-18.B3.2.10
Thielemann, Jens T.	CA	IAC-18.B3.7.4
Thieling, Jörn	CA	IAC-18.D1.IP.6
Thieschäfer, Lutz	CA	IAC-18.A1.2.7
Thieschäfer, Lutz	CA	IAC-18.A1.2.8
Thirkettle, Anthony	A	IAC-18.B3.1.2
This, Nadia	A	IAC-18.B3.4-B6.4.4
Thode, Magdalena	CA	IAC-18.A2.2.9
Thode, Magdalena	CA	IAC-18.C2.8.11
Thoesen, Andrew	A	IAC-18.D4.5.8
Thoma, Ioanna	A	IAC-18.E7.2.7
Thomas, Hubertus	CA	IAC-18.A2.6.3
Thomas Jayachandran, Aurthur Vimal-achandran	CA	IAC-18.E6.2.10
Thomas Jayachandran, Aurthur Vimal-achandran	A	IAC-18.A3.IP.48
Thompson, Benjamin	CA	IAC-18.D2.9-D6.2.12
Thompson, Joseph	CA	IAC-18.C1.IP.1
Thoms, Fabian	CA	IAC-18.B4.3.8
Thomson, Jol	A	IAC-18.E5.3.9
Thoral, Pierre	CA	IAC-18.C3.4.4
Thoreau, Peter	CA	IAC-18.C4.IP.39
Thorgrimson, Joelle	CA	IAC-18.A1.3.5
Thronson, Harley	CA	IAC-18.D1.1.5
Thurow, Kerstin	CA	IAC-18.A2.7.13
Tian, Jia	CA	IAC-18.A3.IP.43
Tian, Jia	A	IAC-18.B2.IP.14
Tian, Mu yin	A	IAC-18.D2.IP.7
Tianyang, Yang	CA	IAC-18.C2.7.9
Ticker, Ronald	CA	IAC-18.B3.1.8
Tie, Ming	A	IAC-18.A3.5.8
Tiedemann, Lars	CA	IAC-18.B2.7.10
Tielke, Julia	CA	IAC-18.A2.2.9
Tielke, Julia	A	IAC-18.C2.8.11
Tilgner, Michael	A	IAC-18.E4.2.6
Timakova, Ekaterina	CA	IAC-18.E2.3-GTS.4.9
Timakova, Ekaterina	CA	IAC-18.E2.4.8
Timmermans, Leo	CA	IAC-18.D2.7.6
Tings, Björn	CA	IAC-18.B1.5.3
Tings, Björn	CA	IAC-18.B1.IP.19
Tinjod, Nathalie	CA	IAC-18.E4.1.3
Tinjod, Nathalie	A	IAC-18.E4.1.5
Tinjod, Nathalie	CA	IAC-18.E4.3B.9
Tiraplegui Riveras, Sergio	CA	IAC-18.C1.5.10
Tiwari, Pradyumna	CA	IAC-18.A7.IP.1
Tiwari, Pradyumna	CA	IAC-18.B4.7.5
Tjon, Saffira	CA	IAC-18.A3.2C.6
Tkachev, Stepan	A	IAC-18.C1.4.7
Tkachev, Stepan	CA	IAC-18.C1.5.7
Tokarz, Marta	CA	IAC-18.C2.IP.6
Tokudome, Shinichiro	CA	IAC-18.C4.2.2
Tolani, Harshita	CA	IAC-18.B1.3.9
Tolentino, Reena	CA	IAC-18.E5.IP.10
Tolochek, Raisa	CA	IAC-18.A1.5.11
Tomilin, Konstantin	CA	IAC-18.D2.7.5
Tomilovskaya, Elena	A	IAC-18.A1.2.6
Tomilovskaya, Elena	CA	IAC-18.A1.2.29
Tomita, Eiichi	CA	IAC-18.D1.5.6
Tomiyama, Tatsuari	CA	IAC-18.E5.1.11
Tommasini, Augustin	CA	IAC-18.C4.6.3
Tomooka, Masashi	CA	IAC-18.E2.2.5
Tomoya, Sakamoto	A	IAC-18.C1.4.4
Tong, Guanghui	CA	IAC-18.A2.5.12
Tong, Wei	CA	IAC-18.D2.9-D6.2.7
Topa, Eugenio	CA	IAC-18.B6.3.6
Toporkov, Alexey	CA	IAC-18.E1.IP.20
Toporkov, Alexey	CA	IAC-18.A6.10-C1.7.10
Toporkov, Alexey	CA	IAC-18.D4.5.5
Topputo, Francesco	A	IAC-18.A3.2A.7
Topputo, Francesco	CA	IAC-18.C1.6.13
Topputo, Francesco	CA	IAC-18.C4.6.2
Topputo, Francesco	CA	IAC-18.B4.8.5
Topputo, Francesco	CA	IAC-18.C1.8.11
Tork, Hillar	CA	IAC-18.B2.1.12
Torrents, Alejandro	CA	IAC-18.E2.3-GTS.4.11
Torres, Raul	A	IAC-18.B4.5.10
Torres, Raul	CA	IAC-18.A2.IP.10
Tortora, Alessandra	CA	IAC-18.A1.3.18
Tortora, Paolo	CA	IAC-18.B4.8.12
Toson, Elena	CA	IAC-18.C4.8-B4.5A.2
Tossaint, Michel	CA	IAC-18.D1.4A.2
Toth, Norbert	CA	IAC-18.A3.4A.2
Toth, Norbert	CA	IAC-18.C3.4.3
Toto, Elisa	CA	IAC-18.C2.6.6
Touboul, Pierre	CA	IAC-18.A2.1.1
TOUBOULIC, Meven	CA	IAC-18.D3.IP.1
Toulza, Sandrine	CA	IAC-18.E6.3.7
Toussaint, Arthur	CA	IAC-18.C4.6.3
Toyoda, Kazuhiro	CA	IAC-18.D5.3.4
Trachtman, Eyal	CA	IAC-18.B2.2.10
Trammer, Martin	CA	IAC-18.A1.IP.3
Tran, Vienna	CA	IAC-18.E1.4.7
Traudt, Tobias	A	IAC-18.C4.3.9
Trautmann, Gabor	A	IAC-18.A1.8.3
Trautner, Roland	A	IAC-18.A3.2B.2
Travin, Vitaly	CA	IAC-18.D4.5.5
Travnikov, Vadim	CA	IAC-18.A2.7.18
Tremblay, Malcom	CA	IAC-18.A1.2.23
Trentlage, Christopher	A	IAC-18.C2.5.4
Treudler, Carl	A	IAC-18.B4.6A.8
Trezzolani, Fabio	CA	IAC-18.C4.8-B4.5A.2
Triberti, Fulvio	CA	IAC-18.B2.7.10
Triebel, Rudolph	CA	IAC-18.A3.2A.8
Triebel, Rudolph	CA	IAC-18.D1.2.7
TRILLAT, Philippe	CA	IAC-18.B1.1.12
Triller, Thomas	CA	IAC-18.A2.4.4
Tringali, Alessandro	A	IAC-18.C1.IP.35
Tringali, Alessandro	A	IAC-18.D1.IP.26
Trinoga, Martin	A	IAC-18.C2.7.1
Trittel, Torsten	A	IAC-18.A2.2.12
Trivailo, Pavel M.	A	IAC-18.C2.3.5
Trivailo, Pavel M.	CA	IAC-18.D1.6.2
Trivedi, Akash	CA	IAC-18.B3.9-GTS.2.10
TRIVEDY, SURANJANA	CA	IAC-18.A5.1.9
Trivino Herrero, Veronica	CA	IAC-18.A5.1.5
Trofimov, Sergey	A	IAC-18.C1.8.10
Trolley, Zac	CA	IAC-18.E5.1.11
Tromba, Andrea	A	IAC-18.B4.5.12
Tromba, Andrea	CA	IAC-18.D1.4B.12
Tronchetti, Fabio	A	IAC-18.E7.5.4
Trottler, Karl	CA	IAC-18.B4.1.10
Trouillefou, Christophe Marcel	CA	IAC-18.A1.IP.8
Trowitzsch, Sebastian	A	IAC-18.B1.1.13
Trucco, Roberto	CA	IAC-18.B6.3.5
Trucco, Roberto	CA	IAC-18.B6.3.6
Truglio, Marco	CA	IAC-18.A6.IP.1
Trujillo, Maite	CA	IAC-18.A6.IP.6
Truong, Khiet	CA	IAC-18.B3.IP.2
Truong, Vivian	A	IAC-18.B3.4-B6.4.11
Truong An, Hoang Xuan	CA	IAC-18.B4.8.15
Trur, Aurélie	A	IAC-18.E3.4.13
Trushlyakov, Valery	A	IAC-18.D2.IP.4
Trzaskalska-Stroinska, Otylia	A	IAC-18.E3.IP.7
Tsai, Ashley	CA	IAC-18.A2.7.10
Tsarkov, Dmitry	A	IAC-18.A1.3.20
Tsarkov, Dmitry	CA	IAC-18.A1.6.11
Tsarkov, Dmitry	CA	IAC-18.A1.7.8
Tse, Man Siu	CA	IAC-18.B4.7.10
Tselousova, Anastasia	CA	IAC-18.C1.8.10
Tsiganis, Kleomenis	CA	IAC-18.A6.4.6
Tsodikovich, Yevgeny	A	IAC-18.E3.4.6
Tsodikovich, Yevgeny	A	IAC-18.D5.IP.2
Tsouni, Alexia	CA	IAC-18.B1.IP.10
Tsuchida, Akira	A	IAC-18.D4.3.2
Tsuda, Yuichi	CA	IAC-18.C2.5.6
Tsuda, Yuichi	CA	IAC-18.A3.4A.2
Tsuda, Yuichi	CA	IAC-18.C1.6.8
Tsumura, Kohji	CA	IAC-18.D1.2.4
Tsutsui, Fumiya	CA	IAC-18.B3.1.5
Tu, Yunwen	CA	IAC-18.B3.9-GTS.2.13
Tubío-Pardavila, Ricardo	CA	IAC-18.B4.2.10
Tucker, Paul	CA	IAC-18.B1.2.8
Tugnoli, Matteo	A	IAC-18.B4.5.4
Tugnoli, Matteo	CA	IAC-18.E1.IP.9
Tumino, Giorgio	A	IAC-18.D2.1.3
Tung, Helen	A	IAC-18.D5.4.5
Tuo, Zhouhui	CA	IAC-18.B4.6A.2
Tuozzi, Alberto	CA	IAC-18.D1.3.3
Turnbull, Oliver	CA	IAC-18.B4.5.9
Turnbull, Oliver	CA	IAC-18.C1.9.2
TURŠIČ, MIHA	A	IAC-18.A3.IP.52
Tuttlebee, Mark	CA	IAC-18.C1.IP.25
Tye, Daniel	CA	IAC-18.A6.5.1
Tymianski, Michael	CA	IAC-18.A1.3.17
Tyni, Mats	CA	IAC-18.D2.6.7
Tyurenkova, Veronika	A	IAC-18.A2.4.2
Tyurenkova, Veronika	CA	IAC-18.A2.IP.11
Tóth, Juraj	CA	IAC-18.A6.IP.6

U

Name	Role	Paper
Ubierna, Marcos	CA	IAC-18.D1.6.5
Uchida, Kosuke	CA	IAC-18.A2.2.3
Uchida, Kosuke	CA	IAC-18.A2.4.11
Uchino, Masaya	A	IAC-18.E7.1.5
Uchitomi, Motoko	CA	IAC-18.D3.1.2
Ueno, Hiroshi	CA	IAC-18.B3.6-A5.3.3
Ueno, Ichiro	CA	IAC-18.E1.3.2
Uesugi, Riko	CA	IAC-18.B3.9-GTS.2.3
Ui, Kyoichi	CA	IAC-18.C4.2.2
Ulamec, Stephan	CA	IAC-18.A3.4A.2
Ulate Gamboa, Brenda	A	IAC-18.E7.IP.19
Ulinowicz, Martyna	CA	IAC-18.B5.1.9
Ullrich, Oliver	CA	IAC-18.A1.8.6
Ullrich, Oliver	CA	IAC-18.A1.8.14
Ulmer, Moritz	CA	IAC-18.B4.6A.8
Uludağ, Mehmet Şevket	CA	IAC-18.B4.6B.5
Uludağ, Mehmet Şevket	CA	IAC-18.C4.8-B4.5A.6
Umemura, Akira	CA	IAC-18.A2.7.7
Umemura, Sayaka	A	IAC-18.B3.3.6
Umezawa, Kazuo	CA	IAC-18.B3.3.3
Umezawa, Takafumi	CA	IAC-18.B4.1.12
Umunna, Reuben Jikeme	A	IAC-18.E3.1.8
Underhill, Kate	A	IAC-18.D2.4.5
Underwood, Craig	A	IAC-18.B4.2.7
Underwood, Craig	A	IAC-18.B1.3.10
Underwood, Craig	CA	IAC-18.E2.4.1
Underwood, Craig	A	IAC-18.A6.5.2
Underwood, Craig	CA	IAC-18.A6.6.4
Underwood, Craig	A	IAC-18.C3.4.5
Unfried, Luciano	A	IAC-18.C2.IP.9
Unnithan, Vikram	CA	IAC-18.A3.1.12
Unsworth, Colleen	CA	IAC-18.D4.1.1
Uppalapati, Sruthi	CA	IAC-18.A3.IP.7
Uppalapati, Sruthi	CA	IAC-18.B3.IP.14
Urata, Katia	A	IAC-18.B4.4.9
Urbina, Diego A.	CA	IAC-18.E5.1.6
Urbina, Jesica	CA	IAC-18.A2.7.12
Urbina, Jesica	A	IAC-18.D4.5.10
Urgoiti, Eduardo	CA	IAC-18.D3.2.12
Urgoiti, Eduardo	CA	IAC-18.D3.IP.2
Urgoiti, Eduardo	CA	IAC-18.D1.6.5
Urso, Michael	A	IAC-18.E7.IP.20
Usman, Muhammad	CA	IAC-18.B1.1.8
Utashima, Masayoshi	CA	IAC-18.C1.8.1
Utzmann, Jens	A	IAC-18.A6.1.7
Utzmann, Jens	CA	IAC-18.A6.7.4

V

Name	Role	Paper
V, Eswaran	CA	IAC-18.C2.IP.33
V, Eswaran	CA	IAC-18.C4.IP.49

V, Eswaran	CA	IAC-18.C4.10.12
Vacca, Valentina	CA	IAC-18.A4.1.9
Vaccarella, Alberto	CA	IAC-18.E6.1.9
Vago, Jorge	CA	IAC-18.A3.3B.3
Vahl, Andreas	CA	IAC-18.D1.IP.20
Vakili-Christensen, Farrokh	CA	IAC-18.A3.2C.8
Vakkada Ramachandran, Abhilash	CA	IAC-18.B1.3.11
Vakkada Ramachandran, Abhilash	CA	IAC-18.A3.3B.8
Valbuena, Miguel A.	CA	IAC-18.A2.7.17
Valdez Roldán, Rafael	CA	IAC-18.E1.IP.7
Valencia Bel, Ferran	CA	IAC-18.C4.3.12
Valente, Cristina	CA	IAC-18.E5.5.3
Valente, Giuseppe	CA	IAC-18.A4.1.9
Valentini, Giovanni	CA	IAC-18.E1.3.6
Valentini, Giovanni	CA	IAC-18.B3.3.3
Valentini, Giovanni	CA	IAC-18.B3.7.7
Valentour, Nanette	A	IAC-18.D2.3.10
Valera, Serge	CA	IAC-18.D1.4A.11
Valesco, Jay	CA	IAC-18.E5.IP.10
Valiente, Ignacio	CA	IAC-18.D3.2.12
Valiente, Ignacio	CA	IAC-18.D3.IP.2
Valinia, Azita	A	IAC-18.A7.1.4
Valle, Carlos	CA	IAC-18.C1.5.5
Valli, Monica	CA	IAC-18.A6.6.4
Valmorbida, Andrea	CA	IAC-18.A6.3.9
Valverde, Alfredo	CA	IAC-18.B4.1.4
Valzano, Luca	CA	IAC-18.A3.2A.11
van Burg, Elco	CA	IAC-18.E6.3.4
Van Dam, Tonie	CA	IAC-18.E1.5.8
van de Borne, Philippe	CA	IAC-18.A1.2.5
Van de Heyning, Paul H	CA	IAC-18.A1.2.14
Van de Poel, Mathijs	CA	IAC-18.B4.8.5
van den Berg, Peter Martijn	A	IAC-18.C4.IP.33
van der Linden, Stefan	A	IAC-18.D2.3.4
van der Meer, Arthur	CA	IAC-18.B1.5.1
van der Sanden, Germaine	CA	IAC-18.E5.3.8
van der Sanden, Germaine	CA	IAC-18.A3.3B.3
van der Sanden, Germaine	A	IAC-18.E5.IP.4
van der Sanden, Germaine	CA	IAC-18.B3.6-A5.3.10
van der Sanden, Germaine	CA	IAC-18.E1.9.2
van der Valk, Nick	CA	IAC-18.B1.3.1
Van der Valk, Nick	CA	IAC-18.B1.3.5
van der Veen, Egbert Jan	CA	IAC-18.D1.1.3
van der Werf, Carlijn	A	IAC-18.E5.IP.6
van Dijk, Chris	A	IAC-18.B4.4.7
van Dijk, Chris	A	IAC-18.D3.3.11
van Ellen, Layla	A	IAC-18.E2.2.7
van Es, Johannes	A	IAC-18.C2.7.3
Van Ginkel, Giulio	CA	IAC-18.D1.IP.17
van Ginkel, Giulio	CA	IAC-18.D5.3.7
Van Hoof, Tristan	CA	IAC-18.D3.2.8
van Linden Tol, Aoife	A	IAC-18.E1.9.15
Van Loon, Jack J.W.A.	CA	IAC-18.A1.8.17
Van Looveren, Gwenaël	CA	IAC-18.A7.2.6
van Muijlwijk, Jan	CA	IAC-18.A4.IP.3
Van Ombergen, Angelique	A	IAC-18.A1.2.14
van Paridon, Darian	CA	IAC-18.C3.4.10
van Strydonck, Dion Anthony	CA	IAC-18.C4.IP.33
Van Vaerenbergh, Stefan	CA	IAC-18.A2.3.10
Van Vynckt, Delphine	CA	IAC-18.E1.6.3
Vananti, Alessandro	CA	IAC-18.A6.1.3
Vananti, Alessandro	CA	IAC-18.A6.9.10
Vananti, Alessandro	A	IAC-18.A6.IP.21
Vanden Bussche, Simon	CA	IAC-18.E1.6.3
Vanden Bussche, Simon	CA	IAC-18.D3.4.6
Vanden Bussche, Simon	CA	IAC-18.E3.6.9
Vandenbrink, Joshua	CA	IAC-18.A2.7.17
Vangen, Scott	CA	IAC-18.B3.6-A5.3.3
Vanhevel, Floris	CA	IAC-18.A1.2.14
Varacalli, Giancarlo	CA	IAC-18.D5.2.6
Varacalli, Giancarlo	CA	IAC-18.E1.5.11
Varacalli, Giancarlo Natale	CA	IAC-18.B1.2.13
Varadharajan, Vivek Shankar	CA	IAC-18.B4.3.11
Varetti, Sara	CA	IAC-18.C2.8.10
Varetti, Sara	CA	IAC-18.C2.9.8
Varga, Rachelle	CA	IAC-18.D1.1.6
Vargas, André	CA	IAC-18.D4.1.19
Vargas Martinez, Hector Simon	A	IAC-18.B4.6B.9
Vargas Niño, Emerson	CA	IAC-18.E2.3-GTS.4.7
Vargas Niño, Emerson	A	IAC-18.E2.1.6
Vargas-Cuentas, Natalia Indira	A	IAC-18.B4.1.14
Vargas-Cuentas, Natalia Indira	A	IAC-18.E5.4.10
Vargas-Cuentas, Natalia Indira	CA	IAC-18.E5.4.11
Vargas-Cuentas, Natalia Indira	A	IAC-18.B1.IP.23
Varma, Neeraj	CA	IAC-18.B5.2.5
Varnoteaux, Philippe	A	IAC-18.E4.1.6
Varnoteaux, Philippe	A	IAC-18.E4.2.7
Vasey, Lauren	CA	IAC-18.E5.1.8
Vasile, Massimiliano	CA	IAC-18.D1.4B.11
Vasile, Massimiliano	CA	IAC-18.C1.8.5
Vasko, Christopher	CA	IAC-18.E3.1.9
Vasko, Christopher	A	IAC-18.E6.3.6
Vassilenko, Valentina	CA	IAC-18.A1.6.11
Vassilieva, Galina	A	IAC-18.A1.4.14
Vassilieva, Galina	CA	IAC-18.A1.IP.18
Vastaroucha, Yvonne	CA	IAC-18.E7.IP.18
Vasudevan, Nijanthan	A	IAC-18.A3.5.9
VAUDOLON, Julien	A	IAC-18.C4.4.9
Vaughn, Israel	CA	IAC-18.A6.1.2
Vaughn, Israel	A	IAC-18.B4.6A.3
Vaughn, Jason	CA	IAC-18.C2.6.2
Vayugundla, Mallikarjuna	CA	IAC-18.A3.2A.8
Vaïda, Pierre	CA	IAC-18.A1.2.22
Vecchi, Giuseppe	CA	IAC-18.A3.2A.11
Vecchione, Giovanni	CA	IAC-18.B2.4.1
Vecchione, Giovanni	CA	IAC-18.B2.5.2
VEDANTHU, ADITYA	A	IAC-18.A1.IP.37
Vedder, Peter	CA	IAC-18.A5.2.2
Veefkind, Pepijn	CA	IAC-18.B1.3.1
Veefkind, Pepijn	CA	IAC-18.B1.3.5
Veenman, Joost	CA	IAC-18.C1.IP.38
Vega, Leticia	CA	IAC-18.A1.4.1
Velasco, Carlos	CA	IAC-18.B3.9-GTS.2.13
Velasco, Jay	CA	IAC-18.A1.4.3
Velez, Dianna	CA	IAC-18.C1.9.7
Velho, Rochelle	CA	IAC-18.A1.4.5
Vellas, Simon	CA	IAC-18.B4.6A.8
Vellutini, Elena	A	IAC-18.A6.7.7
Velotto, Domenico	CA	IAC-18.B1.IP.7
Velotto, Domenico	A	IAC-18.B1.IP.19
Venditti, Flaviane	CA	IAC-18.C1.2.12
Vendittozzi, Cristian	CA	IAC-18.B1.5.8
Veneziano, Anna	A	IAC-18.E7.2.4
Venigalla, Chandrakanth	A	IAC-18.C1.5.2
Venkataramaiah, Jagannatha	A	IAC-18.B1.IP.8
Venkataraman, Arun Subramanian	CA	IAC-18.A3.5.9
Venkatesan, Jayakumar	CA	IAC-18.E6.2.10
Vennekens, Johan	CA	IAC-18.A3.2A.7
Vennekens, Johan	CA	IAC-18.B4.8.5
Ventura, Antonio	CA	IAC-18.C2.IP.10
Ventura, Rodrigo	CA	IAC-18.A3.IP.16
Ventura, Rodrigo	A	IAC-18.D1.6.7
Venugopal, Ramasamy	CA	IAC-18.E1.5.7
Vercella, Valeria	CA	IAC-18.D1.4A.7
Vercruyssen, Nathan	CA	IAC-18.B4.4.7
Verdier, Nicolas	CA	IAC-18.A3.3B.5
Vergara, Eliseo P.	CA	IAC-18.C1.1.2
Vergoossen, Tom	CA	IAC-18.D5.4.4
Verkhovsky, Igor	CA	IAC-18.B3.2.2
Vermeulen, Angelo	A	IAC-18.D1.1.2
Vermeulen, Angelo	CA	IAC-18.E5.IP.3
Vermeulen, Angelo	CA	IAC-18.E5.IP.6
Vernacchia, Matthew	A	IAC-18.D2.4.3
Vernicari, Pietro Maria	CA	IAC-18.A5.1.5
Vernon, Steven	CA	IAC-18.D4.4.2
Verseux, Cyprien	CA	IAC-18.A3.2C.8
Verspieren, Quentin	CA	IAC-18.D3.1.2
Verspieren, Quentin	CA	IAC-18.E5.2.10
Verspieren, Quentin	A	IAC-18.B1.IP.14
Verspieren, Quentin	CA	IAC-18.E7.7-B3.8.5
Verstaen, Sam	CA	IAC-18.C3.4.4
Versteegh, Johan	CA	IAC-18.D3.IP.4
Vespe, Francesco	A	IAC-18.B2.8-GTS.3.1
Vial, Vanessa	CA	IAC-18.C4.4.9
Viale, Andrea	A	IAC-18.D4.3.18
VIANA, TATIANA	A	IAC-18.E3.IP.9
Vickers, John	CA	IAC-18.B3.2.11
Vickers, John	CA	IAC-18.D2.9-D6.2.4
Vidano, Simone	CA	IAC-18.C1.6.4
Vidmar, Matjaz	A	IAC-18.D3.2.5
Vidmar, Matjaz	A	IAC-18.D4.2.14
Vidmar, Matjaz	A	IAC-18.E6.3.3
Vijendran, Sanjay	CA	IAC-18.A3.3A.6
Vilenius, Esa	CA	IAC-18.B4.8.9
Vilhena de Moraes, Rodolpho	CA	IAC-18.A3.IP.57
Vilhena de Moraes, Rodolpho	CA	IAC-18.D4.IP.6
Villacampa, Alicia	A	IAC-18.A1.8.2
Villacampa, Alicia	CA	IAC-18.A2.7.17
Villadei, Walter	CA	IAC-18.A6.1.9
Villadei, Walter	CA	IAC-18.A6.IP.10
Villadei, Walter	CA	IAC-18.A6.7.7
Villain, Rachel	CA	IAC-18.B4.2.2
Villain, Rachel	CA	IAC-18.C4.6.4
Villanueva, David	A	IAC-18.E4.2.2
Villarroel, Beatriz	A	IAC-18.A4.1.7
Világi, Jozef	CA	IAC-18.A6.IP.6
Vinai, Bruno	CA	IAC-18.A3.3A.3
VINALS, JAVIER	A	IAC-18.D3.2.12
VINALS, JAVIER	A	IAC-18.D3.IP.2
Vinals, Javier	CA	IAC-18.D1.6.5
Vinokhodova, Alla	CA	IAC-18.A1.1.12
Viola, Nicole	CA	IAC-18.D2.4.9
Viola, Nicole	A	IAC-18.D1.4A.7
Viola, Nicole	CA	IAC-18.D1.4A.12
Viola, Nicole	CA	IAC-18.D6.3.4
Viola, Nicole	CA	IAC-18.C4.6.6
Viola, Nicole	CA	IAC-18.D2.8-A5.4.7
Viola, Nicole	CA	IAC-18.D2.8-A5.4.10
Violante, Massimo	CA	IAC-18.D1.1.1
Viquerat, Andrew	CA	IAC-18.A6.5.2
Viquerat, Andrew	CA	IAC-18.C3.4.5
Virelli, Maria	CA	IAC-18.B1.5.12
Viroli, Romain	CA	IAC-18.C1.IP.33
Visconti, Pierluigi	A	IAC-18.B6.3.7
Visentin, Gianfranco	CA	IAC-18.D1.6.10
Vishwakarma, Kirti	CA	IAC-18.A4.2.6
Visscher, Peter	CA	IAC-18.A3.2B.6
Visser, Ludo	CA	IAC-18.D2.3.4
Viswanathan, Balaji	A	IAC-18.E2.4.4
Vitelli, Giorgio	CA	IAC-18.D1.6.11
Vivares, Pierrick	CA	IAC-18.E2.3-GTS.4.4
Vivares, Pierrick	CA	IAC-18.A5.1.5
Vives Vallduriola, Gerard	CA	IAC-18.A6.1.7
Viviani, Antonio	CA	IAC-18.A2.4.7
Vladimirov, Gleb	CA	IAC-18.A3.IP.4
Vlasov, Pavel	CA	IAC-18.B3.5.3
Vodermayer, Bernhard	CA	IAC-18.A3.2A.8
Vodnik, Jelle	CA	IAC-18.C2.8.3
Vogel, Daniel	A	IAC-18.C2.IP.18
Vogler, Andreas	CA	IAC-18.E5.2.11
Vogt, Christian	A	IAC-18.A2.1.15
Vogt, Cornelius	CA	IAC-18.A6.6.4
Vogt, Daniel	CA	IAC-18.C3.3.7
Voigt, Philipp	A	IAC-18.A6.6.4
Vojkic, Bosko	CA	IAC-18.E7.IP.23
Volatier, Jean-Baptiste	CA	IAC-18.B1.3.4
Volger, Rik	CA	IAC-18.D3.2.4
Volger, Rik	CA	IAC-18.D3.3.9
Volger, Rik	CA	IAC-18.A1.7.7
Voli, Khadar	CA	IAC-18.C4.IP.5
Voli, Khadar	CA	IAC-18.C4.IP.10
Volkova, Tatiana	CA	IAC-18.A5.2.7
Volkova, Tatiana	A	IAC-18.B3.5.4
Volkova, Tatiana	A	IAC-18.B6.IP.3
Vollmuller, Bert-Johan	A	IAC-18.D3.3.13
Volosatova, Liudmila	CA	IAC-18.E1.2.9
Volpe, Renato	CA	IAC-18.A5.1.6
Volpe, Renato	A	IAC-18.C1.IP.8
von der Dunk, Frans	A	IAC-18.E7.2.8
von der Wiesche, Melanie	A	IAC-18.A1.IP.3
von Kampen, Peter	CA	IAC-18.A2.5.1
von Keiser, Philip	CA	IAC-18.B4.6A.4
von Keiser, Philip	CA	IAC-18.B4.7.3
von Weyhe, Bernhard	CA	IAC-18.E1.6.4
Vongsantivanich, Wasanchai	A	IAC-18.E5.2.10
Vornholt, Marcel	A	IAC-18.E1.IP.22
Vorobiev, Alex	CA	IAC-18.D1.4B.3
Voropaev, Viktor	CA	IAC-18.A6.IP.1
Voropaev, Viktor	A	IAC-18.A6.7.5
Voß, Anna	A	IAC-18.A3.2B.11
Voß, Anna	CA	IAC-18.A3.2C.5
Vossen, Rene	CA	IAC-18.A3.5.8
Vountas, Marco	CA	IAC-18.B1.3.7
Vrakking, Vincent	CA	IAC-18.A1.IP.4
Vrakking, Vincent	CA	IAC-18.B3.7.14
Vricella, Antonio	CA	IAC-18.C2.IP.19
Vricella, Antonio	CA	IAC-18.C2.8.1
Vujjini, Vijay	CA	IAC-18.B6.1.3
Vyshnav, Pradyumna Nanda	A	IAC-18.E2.1.3
Vázquez, Antón	CA	IAC-18.B4.2.10
Vázquez, Antón	CA	IAC-18.B5.2.13
Vögele, Thomas	CA	IAC-18.D1.IP.27
Völk, Stefan	A	IAC-18.A3.4B.1

W

Name	Role	Paper
Waclavicek, René	CA	IAC-18.E5.1.6
Waclavicek, René	CA	IAC-18.B3.7.14
Wada, Kensuke	CA	IAC-18.D4.2.13
Wagenblast, Alex	CA	IAC-18.B6.IP.1
Wagner, Dirk	CA	IAC-18.A1.6.3
Wagner, Dirk	CA	IAC-18.A1.6.12
Wagner, Ines	CA	IAC-18.A1.7.3
Wagner, Paul	CA	IAC-18.B6.1.8
Wagner, Scarlet	A	IAC-18.E7.1.13
Wagner, Volker	CA	IAC-18.A2.2.7
Wahl, Arthur	CA	IAC-18.D1.IP.6
Waizenegger, Kevin	CA	IAC-18.E2.3-GTS.4.1
Wakata, Koichi	A	IAC-18.B3.1.5
Wakita, Yoshinori	CA	IAC-18.A1.2.16
Wakita, Yoshinori	CA	IAC-18.A1.3.2
Wald, Samuel	A	IAC-18.E5.1.3
Walker, John	A	IAC-18.A3.IP.34
Walker, John	CA	IAC-18.D3.IP.1
Walker, John	CA	IAC-18.A3.2C.9
Walker, Roger	CA	IAC-18.A3.2A.7
Walker, Roger	CA	IAC-18.B4.8.5
Walker, Scott	CA	IAC-18.A6.4.6
Walker, Scott	CA	IAC-18.A6.3.7
Walker, Scott	CA	IAC-18.A6.IP.19
Walker, Scott	A	IAC-18.C2.9.3
Walko, Przemyslaw	CA	IAC-18.C4.3.11
Walko, Przemyslaw	A	IAC-18.C4.IP.3
Walko, Przemyslaw	A	IAC-18.C4.IP.4
Walser, Reinhold	A	IAC-18.A2.1.6
Walser, Reinhold	CA	IAC-18.A2.1.10
Walser, Reinhold	CA	IAC-18.A2.IP.12
Walsh, Robert	A	IAC-18.C2.5.10
Walsh, Robert	A	IAC-18.E1.1.7
Walter, Nicolas	CA	IAC-18.A3.5.11
Walter, Ulrich	CA	IAC-18.B2.2.2
Walter, Ulrich	CA	IAC-18.C1.4.6
Walton, Lori	CA	IAC-18.A4.2.2
Walz, Carl	CA	IAC-18.B3.4-B6.4.7
Wan, Chengan	CA	IAC-18.C3.3.10
Wan, Stephanie	CA	IAC-18.B1.IP.25
Wan, Wei	A	IAC-18.B5.3.10
Wan, Wen ya	A	IAC-18.A6.IP.42
Wan, Xiaoping	CA	IAC-18.C2.2.3

Wander, Alexandra	A	IAC-18.B6.3.10
Wander, Alexandra	CA	IAC-18.A6.6.4
Wang, Chen	CA	IAC-18.C2.5.8
WANG, Chongzhen	A	IAC-18.A1.IP.27
WANG, Chunhui	CA	IAC-18.A1.IP.24
Wang, Dan	A	IAC-18.B2.4.8
Wang, Daqing	CA	IAC-18.B2.IP.14
Wang, Enmei	CA	IAC-18.C3.1.8
Wang, Feng	CA	IAC-18.B2.IP.10
Wang, Guangxu	A	IAC-18.C4.IP.36
Wang, Guangxu	A	IAC-18.C4.IP.37
Wang, Guangyu	CA	IAC-18.C4.9.11
Wang, Guangyu	CA	IAC-18.C4.IP.15
Wang, Guoji	CA	IAC-18.D5.2.11
Wang, Haihong	CA	IAC-18.B2.5.10
Wang, Hailong	CA	IAC-18.A1.3.4
Wang, Haitao	CA	IAC-18.A4.1.10
Wang, Haoze	A	IAC-18.C4.7-C3.5.4
Wang, Hui	A	IAC-18.C1.3.6
Wang, Jia	A	IAC-18.A3.IP.21
Wang, Jia	A	IAC-18.A3.IP.32
Wang, Jian-zhao	CA	IAC-18.A7.2.1
Wang, Jingyu	CA	IAC-18.A1.8.10
Wang, Kexin	CA	IAC-18.D2.IP.5
Wang, Lei	CA	IAC-18.C3.IP.10
Wang, Lin-Jie	A	IAC-18.A1.IP.31
WANG, LIWEI	A	IAC-18.D5.4.2
Wang, Min	A	IAC-18.B2.2.13
Wang, Mingming	A	IAC-18.C1.4.6
Wang, Pengfei	CA	IAC-18.D2.8-A5.4.11
Wang, Rui	A	IAC-18.C3.1.10
Wang, Shengjie	CA	IAC-18.A6.IP.18
Wang, Wei	CA	IAC-18.A1.5.8
Wang, Wei	A	IAC-18.A3.IP.43
Wang, Xiaohui	A	IAC-18.D1.4A.5
Wang, Xiaohui	CA	IAC-18.D2.8-A5.4.8
WANG, Xiaowei	A	IAC-18.D4.IP.11
Wang, Xun	A	IAC-18.C2.IP.34
Wang, Yamin	CA	IAC-18.D4.1.5
Wang, Yamin	CA	IAC-18.D4.1.14
Wang, Yamin	CA	IAC-18.A3.4B.7
WANG, Ying	A	IAC-18.A7.2.1
Wang, Youliang	A	IAC-18.C1.IP.28
WANG, YU D.	CA	IAC-18.D2.6.9
Wang, Yuanding	A	IAC-18.D2.2.4
Wang, Yue	CA	IAC-18.C2.IP.26
Wang, Yue	A	IAC-18.A6.10-C1.7.3
Wang, Yunpeng	CA	IAC-18.C1.5.6
Wang, Zelin	A	IAC-18.C2.IP.31
Wang, Zhaokui	CA	IAC-18.E2.4.3
Wang, Zhaokui	CA	IAC-18.B4.7.4
Wang, Zhaolong	CA	IAC-18.B2.IP.3
Wang, Zhaowei	A	IAC-18.C2.4.2
Wang, Zhifu	CA	IAC-18.D1.4A.10
Wang, Zhixin	CA	IAC-18.C4.IP.44
Wang, Zi Fei	CA	IAC-18.D1.1.6
WARANON, LIKHIT	A	IAC-18.B4.9-GTS.5.2
Ward, Pauline	CA	IAC-18.E1.8.3
Warner, Marvin	CA	IAC-18.A2.1.13
Warner, Marvin	A	IAC-18.A2.IP.7
Warnke, Elisabeth	CA	IAC-18.A1.8.7
Warth, Nathanael	CA	IAC-18.A1.7.3
Wasilewski, Szymon	CA	IAC-18.B5.1.9
Wasniowski, Aleksander	A	IAC-18.A1.1.13
Wasniowski, Aleksander	CA	IAC-18.B6.3.4
Wasniowski, Aleksander	CA	IAC-18.A1.IP.10
Wasniowski, Aleksander	A	IAC-18.A1.7.12
Wasniowski, Aleksander	CA	IAC-18.A3.2C.8
Wasser, Kai	CA	IAC-18.A1.7.17
Wasser, Yi	CA	IAC-18.B6.1.1
Wat, Howard	CA	IAC-18.E1.4.7
Watanabe, Akiko	A	IAC-18.E7.IP.15
Watanabe, Hiromi	CA	IAC-18.C3.4.6
Watanabe, Kazuki	CA	IAC-18.C3.1.7
Watanabe, Kazuo	CA	IAC-18.E1.3.2
Watanabe, Masahito	A	IAC-18.A2.2.3
Watanabe, Masahito	A	IAC-18.A2.4.11
Waterman, Gideon	CA	IAC-18.A1.5.10
Watkins, Bobby	A	IAC-18.B3.4-B6.4.8
Watts, Ben	A	IAC-18.A5.1.13
Watts, Trevor	CA	IAC-18.D2.3.4
Webb, Alan	A	IAC-18.B4.5.6
Weber, Bernhard	CA	IAC-18.B3.6-A5.3.5
Weber Martins, Thiago	A	IAC-18.D1.1.9
Webster, Cassandra	CA	IAC-18.C1.9.3
Webster, Samuel	A	IAC-18.C4.3.7
Weclewski, Piotr	CA	IAC-18.D3.3.2
Weclewski, Piotr	CA	IAC-18.A3.IP.37
Wedler, Armin	A	IAC-18.A3.2A.8
Wedler, Armin	A	IAC-18.C2.5.1
Wedler, Armin	CA	IAC-18.B3.6-A5.3.3
Wedler, Armin	CA	IAC-18.B3.6-A5.3.5
Weeden, Brian	CA	IAC-18.D1.5.8
Wehage, Kristopher	CA	IAC-18.D1.4B.1
Wehbe, Bilal	CA	IAC-18.D1.2.7
Wehland, Markus	CA	IAC-18.A1.IP.26
Wehland, Markus	CA	IAC-18.A1.8.7
Wehland, Markus	CA	IAC-18.A1.8.8
Wehland, Markus	CA	IAC-18.A1.8.9
Wehland, Markus	A	IAC-18.A2.7.11
Wei, Chuanfeng	A	IAC-18.B3.6-A5.3.11
Wei, Minsong	CA	IAC-18.B4.6A.7
Wei, QIN	CA	IAC-18.B1.IP.1
Wei, Xianggeng	CA	IAC-18.C4.9.4
WEI, XUEZHONG	CA	IAC-18.D5.4.2
Wei, Yuchen	CA	IAC-18.B4.2.7
Wei, Zhang	CA	IAC-18.A7.IP.3
Weigel, Martin	CA	IAC-18.A6.1.6
Weihua, Ma	CA	IAC-18.C1.IP.17
Weikert, Marcel	CA	IAC-18.C4.7-C3.5.5
Weikert, Sven	CA	IAC-18.A6.5.3
Weinfurter, H.	CA	IAC-18.B4.2.12
Weis, Stefan	CA	IAC-18.C4.4.5
Weisenberger, Steffen	CA	IAC-18.B4.6B.14
Weisgerber, Michael	A	IAC-18.D5.1.11
Weiss, Bernd Michael	A	IAC-18.E1.5.4
Weiss, Bernd Michael	A	IAC-18.E6.IP.2
Weiss, Peter	CA	IAC-18.E5.1.6
Weiss, Peter	CA	IAC-18.D3.3.7
Weißgärber, Thomas	CA	IAC-18.C2.8.8
Weitz, Noah	CA	IAC-18.D2.IP.12
Welch, Chris	CA	IAC-18.D3.1.4
Welch, Chris	CA	IAC-18.A3.IP.39
Welch, Chris	CA	IAC-18.C4.IP.39
Welch, Chris	CA	IAC-18.B5.3.8
Welch, Chris	CA	IAC-18.B4.8.16
Welch, Chris	CA	IAC-18.D4.4.6
Welle, Richard	A	IAC-18.B2.7.3
Wen, Ming	CA	IAC-18.C4.IP.15
Wen, Tee Li	CA	IAC-18.E1.4.7
Wen, Xue-zhong	CA	IAC-18.A6.IP.20
Wen, Xue-zhong	CA	IAC-18.A6.IP.20
Wendrich, Thijs	CA	IAC-18.A2.3.5
Wendrich, Thijs	CA	IAC-18.A2.5.6
Wendt, Christian	A	IAC-18.D2.IP.11
Weng, Jingnong	CA	IAC-18.E1.7.4
Wenger, Manuela	CA	IAC-18.B4.3.6
Wenzel, Andreas	A	IAC-18.C1.6.10
Wenzhoefer, Frank	CA	IAC-18.A3.2A.8
Wenzlawski, Andrè	CA	IAC-18.A2.1.8
Weppler, Johannes	A	IAC-18.E1.4.1
Weppler, Johannes	CA	IAC-18.E1.2.1
Weps, Benjamin	A	IAC-18.A2.5.6
Werkheiser, Nikki	CA	IAC-18.E1.7.1
Werner, Andreas	CA	IAC-18.A1.2.10
Werner, Anika	CA	IAC-18.A1.1.7
Werner, Anika	CA	IAC-18.A1.1.8
Werner, Anika	CA	IAC-18.A1.2.11
Werner, Anika	CA	IAC-18.A1.2.13
Werner, Anika	CA	IAC-18.A1.2.24
Werner, Anika	CA	IAC-18.A1.4.4
Werner, Anika	A	IAC-18.A1.4.6
Werner, Anika	CA	IAC-18.A1.4.19
Werner, Jonas	CA	IAC-18.C2.IP.12
Werner, Klaus	CA	IAC-18.B2.5.4
Werner, Klaus	CA	IAC-18.A7.3.7
Werner, Norbert	A	IAC-18.B4.2.8
Werner, Philipp	CA	IAC-18.B4.3.1
Werner, Philipp	CA	IAC-18.B4.6A.4
Werner, Robert	CA	IAC-18.D2.6.6
Werthimer, Dan	CA	IAC-18.A4.1.9
Wertz, Philipp	A	IAC-18.B2.2.8
Wertz, Philipp	A	IAC-18.B1.IP.34
Westall, Frances	CA	IAC-18.A1.6.12
Westerdorff, Karsten	CA	IAC-18.B4.6A.8
Wheeler, Clyde	A	IAC-18.B4.4.3
Whitley, Ryan	CA	IAC-18.A3.1.1
Whitley, Sally	CA	IAC-18.D1.4B.4
Whitmarsh, Stephen	CA	IAC-18.A4.IP.3
Wicht, Andreas	CA	IAC-18.A2.1.9
Wickert, Matthias	CA	IAC-18.C2.5.11
Wickhusen, Kai	CA	IAC-18.A3.3A.11
Wiedemann, Carsten	A	IAC-18.A6.2.6
Wiedemann, Carsten	CA	IAC-18.A6.3.5
Wieder, Maxwell	A	IAC-18.D1.4B.4
Wiegand, Andreas	CA	IAC-18.A6.5.3
Wiehle, Stefan	A	IAC-18.B1.5.3
Wiehle, Stefan	CA	IAC-18.B1.5.4
Wiehle, Stefan	CA	IAC-18.B1.IP.7
Wiercioch, Maurice	CA	IAC-18.B1.5.4
Wiertz, Thierry	A	IAC-18.C4.7-C3.5.9
Wiese, Tim	A	IAC-18.D4.3.7
Wiis, Jophiel	CA	IAC-18.A7.2.6
Wilcox, Brian	CA	IAC-18.B3.6-A5.3.3
Wilczynski, Lukasz	A	IAC-18.E1.IP.5
Wild, Fridolin	CA	IAC-18.B5.1.11
Wilde, Detlef	CA	IAC-18.A2.5.5
Wilde, Joshua	CA	IAC-18.A5.1.5
Wilde, Joshua	CA	IAC-18.E3.IP.13
Wilde, Martina	CA	IAC-18.A3.2A.8
Wiley, Jaclyn	A	IAC-18.E1.3.10
Wilhelm, Claire	A	IAC-18.D3.4.1
Wilken, Jascha	A	IAC-18.D2.4.1
Wilkie, W. Keats	CA	IAC-18.C2.6.2
Wilkinson, Jack	A	IAC-18.E1.9.3
Willberg, Bertram	CA	IAC-18.C2.5.1
Wille, Eric	A	IAC-18.A7.1.1
Willekens, Philippe	A	IAC-18.E1.6.4
Willekens, Stephanie	A	IAC-18.A3.1.11
Willems, Sebastian	CA	IAC-18.C2.IP.1
Williams, Adam	CA	IAC-18.B6.3.5
Williams, Adam	CA	IAC-18.B6.3.6
Williams, Nehemiah	CA	IAC-18.A3.1.3
Williams, Timothy	CA	IAC-18.B2.1.5
Willnecker, Rainer	CA	IAC-18.A2.6.8
Willnecker, Rainer	CA	IAC-18.A2.6.11
Willner, Konrad	CA	IAC-18.A3.3A.11
Wilson, Hilary K.	CA	IAC-18.B1.4.7
Wilson, Krystal	A	IAC-18.B1.6-GTS.1.1
Wilton-Clark, Harry	CA	IAC-18.D1.1.6
Wimmer-Schweingruber, Robert	CA	IAC-18.D4.4.2
Wimmer-Schweingruber, Robert F.	CA	IAC-18.C2.1.5
Wimmer-Schweingruber, Robert F.	A	IAC-18.D4.4.1
Windisch, Lisa	CA	IAC-18.A3.2C.5
Windmüller, Michael	CA	IAC-18.B3.IP.9
Windpassinger, Patrick	CA	IAC-18.A2.1.8
Winglee, Robert	CA	IAC-18.E1.1.4
Winglee, Robert	CA	IAC-18.E1.2.6
Wink, Jeroen	A	IAC-18.D2.6.6
Winter, Frank H.	A	IAC-18.E4.2.4
Winter, Kirian	CA	IAC-18.C2.8.3
Winter, Othon	CA	IAC-18.D4.IP.6
Winters, Gaele	CA	IAC-18.E3.1.14
Wippermann, Torben	CA	IAC-18.C3.4.3
Wisniewski, Lukasz	A	IAC-18.A3.IP.37
Wisniewski, Lukasz	A	IAC-18.A3.4B.5
Wisse, Menko	A	IAC-18.D2.3.2
Withers, Paul	CA	IAC-18.B4.2.9
Witoon, Siyada	CA	IAC-18.E1.2.8
Witt, Johannes	CA	IAC-18.B3.7.1
Witt, Johannes	CA	IAC-18.B3.7.4
Witte, Lars	CA	IAC-18.A3.IP.59
Witte, Lars	CA	IAC-18.A3.4B.2
Wittig, Alexander	CA	IAC-18.C1.1.2
Wittig, Manfred	CA	IAC-18.B2.5.7
Wittig, Manfred	CA	IAC-18.B4.8.9
Wittig, Sarah	CA	IAC-18.B2.8-GTS.3.12
Witzmann, Marco	CA	IAC-18.D3.4.6
Witzmann, Marco	A	IAC-18.E3.6.9
Wiśniewski, Łukasz	CA	IAC-18.C2.IP.6
Wiśniewski, Łukasz	CA	IAC-18.A3.5.3
Woda, Clemens	CA	IAC-18.A1.5.1
Woda, Clemens	CA	IAC-18.C2.6.8
Woerner, David	A	IAC-18.C4.7-C3.5.1
Wohlgemuth, Rainer	CA	IAC-18.B3.9-GTS.2.2
Woicke, Svenja	A	IAC-18.C1.5.9
Wojcik, Harrison	CA	IAC-18.A1.1.4
Wojtkowiak, Harald	CA	IAC-18.B4.3.13
Wolahan, Andrew	CA	IAC-18.A6.6.10
Wolanski, Piotr	CA	IAC-18.C4.3.12
Wolanski, Piotr	CA	IAC-18.A6.5.9
Wolanski, Piotr	CA	IAC-18.D2.9-D6.2.11
Wolbers, Thomas	CA	IAC-18.A1.4.19
Wolf, Jürgen	CA	IAC-18.A7.3.7
Wolf, Ronny	CA	IAC-18.B4.6B.14
Wolf, Sebastian	A	IAC-18.A1.6.8
Wolf, Thomas	A	IAC-18.C4.4.5
Wollack, Edward J.	CA	IAC-18.A7.3.8
Wollenhaupt, Birk	A	IAC-18.C4.4.7
Wolny, Josh	CA	IAC-18.E3.4.2
Wolny, Josh	CA	IAC-18.E1.7.13
Wolny, Josh	CA	IAC-18.D3.4.1
Woltmann, Marian	CA	IAC-18.A2.1.15
Woltran, Markus	CA	IAC-18.E3.1.3
Woltran, Markus	A	IAC-18.E3.1.4
Woo, Pamela	CA	IAC-18.A7.3.2
Wood, Danielle	A	IAC-18.E5.2.4
Wood, Danielle	A	IAC-18.B1.6-GTS.1.2
Wood, Danielle	CA	IAC-18.E6.3.5
Wood, Jeanne	CA	IAC-18.E3.6.2
Woods, Arthur R.	A	IAC-18.D4.2.7
Woods, Arthur R.	CA	IAC-18.E5.IP.9
Wooldridge, Charles	CA	IAC-18.B1.1.1
Worrall, Kevin	CA	IAC-18.C4.8-B4.5A.13
Worrall, Stephen	CA	IAC-18.B4.2.2
Wortman, Jake	CA	IAC-18.A3.4B.8
Wortmann, Andreas	A	IAC-18.D1.3.9
Wu, Feng	CA	IAC-18.A1.3.4
Wu, Jianjun	CA	IAC-18.C4.IP.32
WU, MANRUI	CA	IAC-18.A1.1.5
Wu, Meng	CA	IAC-18.C4.9.6
Wu, Qiang	CA	IAC-18.A6.3.1
Wu, Ruilin	CA	IAC-18.A1.1.5
WU, Shao-Ying	CA	IAC-18.D1.3.7
Wu, Shengbao	A	IAC-18.D2.1.10
Wu, Shunan	A	IAC-18.C3.1.8
Wu, Shunan	CA	IAC-18.C2.3.12
Wu, Shunxiao	A	IAC-18.B2.IP.17
Wu, Xiaodan	A	IAC-18.B5.1.8
Wu, Xiaodan	A	IAC-18.E7.4.10
Wu, Yunhua	CA	IAC-18.B2.IP.10
Wu, Yunhua	A	IAC-18.C1.IP.14
Wu, Zhigang	CA	IAC-18.C3.1.8
Wu, Zhigang	CA	IAC-18.C2.3.12
Wu, Zhuoting	CA	IAC-18.B1.2.10
Wunderlich, Rainer	A	IAC-18.A2.6.13
Wurm, Gerhard	CA	IAC-18.A2.3.13
Wurm, Gerhard	CA	IAC-18.A2.IP.8
Wurm, Gerhard	CA	IAC-18.A2.7.8
Wuyts, Floris L.	CA	IAC-18.A1.2.14

Wygachiewicz, Marcin	CA	IAC-18.A6.6.10
Wypukol, Magdalena	CA	IAC-18.A1.IP.21
Wypukol, Magdalena	A	IAC-18.A1.IP.22
Wypukol, Magdalena	CA	IAC-18.A1.7.1
Wójcik, Arkadiusz	CA	IAC-18.B5.1.9
Wörner, Lisa	A	IAC-18.A2.1.13
Wörner, Lisa	CA	IAC-18.A2.IP.7
Wöske, Florian	A	IAC-18.C1.IP.11
Wöske, Florian	CA	IAC-18.D1.IP.32
Wösten, Han	CA	IAC-18.E5.1.7
Wübbels, Guido	CA	IAC-18.D2.6.1
Wüstenberg, Philipp	CA	IAC-18.C3.3.11
Wüstenberg, Philipp	CA	IAC-18.D3.3.6
Wüstenberg, Philipp	CA	IAC-18.C2.8.8

X

Name	Role	Paper
Xi, CHEN	CA	IAC-18.B1.IP.1
Xia, Weiqiang	A	IAC-18.A1.6.10
Xia, Zhaoyang	CA	IAC-18.C4.9.15
Xiangyan, ZHANG	CA	IAC-18.B1.IP.1
Xiao, Aimin	CA	IAC-18.D1.3.8
Xiao, Kai	CA	IAC-18.C2.IP.26
Xiao, Xiao	A	IAC-18.C2.IP.22
Xiao, Yong	CA	IAC-18.C2.2.3
Xiao Su, YI	A	IAC-18.E1.7.4
Xiaohua, Huang	CA	IAC-18.B3.7.11
Xiaoli, Chen	A	IAC-18.B1.3.3
Xiaona, Luan	CA	IAC-18.B2.IP.7
Xiaopeng, ZHANG	CA	IAC-18.D5.1.7
Xiaopeng, ZHANG	A	IAC-18.B1.IP.1
XiaoQun, Chen	CA	IAC-18.B2.1.9
XIE, Liang	CA	IAC-18.A1.IP.24
Xie, Ping	CA	IAC-18.D1.1.7
Xie, Yong Chun	A	IAC-18.C1.5.6
Xin, Mingyuan	CA	IAC-18.C4.9.11
Xin, Mingyuan	CA	IAC-18.C4.IP.15
Xing, Fei	CA	IAC-18.B4.6A.7
Xing, Jie	CA	IAC-18.C3.3.12
Xinshi, HU	CA	IAC-18.B2.4.7
Xinxin, Fang	CA	IAC-18.C4.9.9
Xinxin, Fang	CA	IAC-18.C4.3.4
Xiong, Rui	CA	IAC-18.D5.1.7
Xiong, Rui	A	IAC-18.B2.IP.12
Xiping, Feng	CA	IAC-18.C4.IP.21
Xiyun, Hou	CA	IAC-18.C1.2.9
Xiyun, Hou	A	IAC-18.D2.3.9
Xu, Biao	A	IAC-18.B6.2.4
Xu, Chao	CA	IAC-18.C2.5.8
Xu, Da	A	IAC-18.A1.2.23
XU, FENG	CA	IAC-18.C2.5.8
XU, Hongping	CA	IAC-18.D6.3.6
Xu, Hongyan	A	IAC-18.B2.1.9
Xu, Jiahui	CA	IAC-18.B2.8-GTS.3.4
Xu, Ming	CA	IAC-18.C1.2.10
Xu, Peipei	CA	IAC-18.D1.5.7
Xu, Rui	CA	IAC-18.C1.3.6
Xu, Rui	A	IAC-18.D2.3.5
XU, WEI	A	IAC-18.D5.1.8
Xu, Youtao	CA	IAC-18.D4.IP.11
Xu, Zhi	CA	IAC-18.D2.5.11
Xu, Zuhua	CA	IAC-18.D2.IP.5
XUAN, CHEN	A	IAC-18.C2.4.7
Xuan, Jin	CA	IAC-18.C4.3.4
Xun, Duan	A	IAC-18.C1.2.1
Xuzhi, Li	CA	IAC-18.A7.IP.3

Y

Name	Role	Paper
Yablonina, Maria	CA	IAC-18.E5.1.8
Yagi, Kazuhiro	CA	IAC-18.D2.1.8
Yaglioglu, Burak	A	IAC-18.E1.4.9
Yakoov, Moti	CA	IAC-18.B1.1.4
Yam, Chit Hong	A	IAC-18.A3.IP.30
Yamada, Yuki	A	IAC-18.E2.2.5
Yamada, Yuki	CA	IAC-18.C1.5.4
Yamagami, Tatsuya	CA	IAC-18.A6.3.2
Yamagiwa, Yoshiki	A	IAC-18.D4.3.10
Yamagiwa, Yoshiki	CA	IAC-18.C4.7-C3.5.11
Yamaguchi, Shoki	CA	IAC-18.A1.2.17
Yamamoto, Eriko	CA	IAC-18.A6.8.6
Yamamoto, Makoto	CA	IAC-18.E1.3.2
Yamamoto, Ryuichi	CA	IAC-18.D2.2.1
Yamamoto, Takayuki	CA	IAC-18.D2.7.2
Yamamoto, Takayuki	CA	IAC-18.B4.5.2
Yamamoto, Takayuki	A	IAC-18.C1.9.10
Yamaoka, Kazutaka	CA	IAC-18.B4.2.4
Yamauchi, Takashi	CA	IAC-18.D5.1.6
Yamauchi, Takashi	CA	IAC-18.B4.7.10
Yamazaki, Hideaki	CA	IAC-18.D4.2.8
Yamazaki, Masahiko	A	IAC-18.B4.1.12
Yan, Biao	CA	IAC-18.C2.9.13
Yan, Fei	A	IAC-18.C2.IP.37
Yan, Hong	CA	IAC-18.A2.IP.4
YAN, Qu	CA	IAC-18.A1.IP.24
YAN, Xiaotao	CA	IAC-18.D6.3.6
Yan, Xiu-Tian	CA	IAC-18.D1.2.7
Yan, Xiu-Tian	CA	IAC-18.D3.2.12
Yan, Xiu-Tian	CA	IAC-18.D3.IP.2
YAN, Yingwen	A	IAC-18.C4.IP.14
Yanbo, Wang	CA	IAC-18.A6.6.9
Yang, Baohua	CA	IAC-18.C1.5.6
Yang, Chao	CA	IAC-18.A1.3.4
Yang, Clément	CA	IAC-18.C4.6.3
Yang, Demin	CA	IAC-18.D2.5.11
Yang, Dong	A	IAC-18.D3.IP.3
Yang, Fanglin	CA	IAC-18.C3.3.12
Yang, Guangzhi	CA	IAC-18.D5.1.7
Yang, Guangzhi	CA	IAC-18.D1.4A.10
Yang, Guangzhi	CA	IAC-18.B1.IP.1
Yang, Guangzhi	CA	IAC-18.B2.IP.12
Yang, Haifeng	A	IAC-18.B2.4.7
Yang, Hong	A	IAC-18.B3.9-GTS.2.8
Yang, Hua	CA	IAC-18.D5.1.12
Yang, Huxiao	A	IAC-18.E7.1.9
Yang, Juanjuan	CA	IAC-18.B1.IP.12
Yang, Jungang	A	IAC-18.C2.2.3
Yang, Junli	CA	IAC-18.B1.4.6
Yang, Keying	CA	IAC-18.C1.3.10
Yang, Liang	CA	IAC-18.C2.8.12
Yang, Mengfei	CA	IAC-18.D5.1.12
YANG, Mu	A	IAC-18.D4.2.4
Yang, Nan	CA	IAC-18.C1.IP.14
Yang, Wulin	CA	IAC-18.A6.IP.23
Yang, Xuegeng	CA	IAC-18.A2.4.12
YANG, Xuejiao	CA	IAC-18.B3.2.13
Yang, Yang	CA	IAC-18.A6.9.2
Yang, Zhen	CA	IAC-18.D1.IP.29
Yano, Hajime	CA	IAC-18.A3.5.11
Yanova, Olga	CA	IAC-18.D5.1.5
Yao, Dong	A	IAC-18.D1.IP.2
Yao, Lining	CA	IAC-18.B3.9-GTS.2.13
Yao, NaXin	CA	IAC-18.C2.IP.26
Yasaka, Tetsuo	A	IAC-18.D4.3.14
Yasuhiro, Nakamura	CA	IAC-18.A2.IP.9
Yaxing, Cai	CA	IAC-18.B2.3.7
Yazdani Sarvestani, Hamidreza	A	IAC-18.C2.4.3
Yañez, Pablo	CA	IAC-18.B5.2.13
Yemets, Mykhailo	A	IAC-18.C4.8-B4.5A.13
Yemets, Vitaly	CA	IAC-18.C4.8-B4.5A.13
Yenawine, Alec	A	IAC-18.C4.IP.6
YI, Hang	CA	IAC-18.A1.6.10
YI, Hang	CA	IAC-18.D6.3.6
Yi, Xiaosu	CA	IAC-18.B2.IP.12
Yilmaz, Goktan	CA	IAC-18.E2.3-GTS.4.2
Yin, Jin	A	IAC-18.C2.IP.26
Ying, Chen	CA	IAC-18.A1.3.4
Yoder, Christopher	A	IAC-18.A3.5.1
Yokota, Shun	A	IAC-18.D4.3.15
Yokoya, Ryunosuke	CA	IAC-18.D4.2.13
Yokoyama, Shotarou	CA	IAC-18.C2.5.2
Yonemoto, Koichi	A	IAC-18.E6.1.8
Yonemoto, Koichi	CA	IAC-18.D2.6.2
Yoneyama, Misato	CA	IAC-18.A6.3.2
Yongfu, GUO	CA	IAC-18.B1.IP.1
Yoon, Sung Wook	A	IAC-18.D1.IP.24
Yoon, Zizung	CA	IAC-18.B2.2.1
Yoshida, Kazuya	CA	IAC-18.D1.3.5
Yoshida, Kazuya	CA	IAC-18.D3.IP.1
Yoshida, Kazuya	CA	IAC-18.A3.2C.9
Yoshimitsu, Kohei	CA	IAC-18.B4.1.12
Yoshimitsu, Tetsuo	CA	IAC-18.A3.4A.2
Yost, Bruce	A	IAC-18.B4.9-GTS.5.12
You, Yancheng	CA	IAC-18.C4.9.6
Ytterskog, Anne	A	IAC-18.D2.2.5
Yu, Chunrui	CA	IAC-18.B2.IP.8
Yu, Chunxu	A	IAC-18.A3.3B.2
Yu, Fei	CA	IAC-18.D1.IP.18
Yu, Feng	CA	IAC-18.C1.IP.14
Yu, Mengxi	A	IAC-18.B1.4.6
Yu, Nanjia	A	IAC-18.C4.5.13
Yu, Xia	A	IAC-18.E5.2.3
Yu, Xiaoyan	A	IAC-18.C2.IP.35
Yu, Xiaozhou	CA	IAC-18.C3.IP.5
Yu, Xiaozhou	CA	IAC-18.B4.6B.6
Yuan, Chaoyi	A	IAC-18.C3.IP.12
Yuan, Huoping	CA	IAC-18.B5.1.6
Yuan, Jianping	CA	IAC-18.C1.1.3
Yuan, Jianping	CA	IAC-18.A6.5.7
Yuan, Jianping	CA	IAC-18.A6.IP.42
Yuan, Jianping	CA	IAC-18.A7.3.11
Yuan, Ming	CA	IAC-18.A1.8.10
Yuan, Yuan	CA	IAC-18.B2.3.8
Yudanov, Nikolay	CA	IAC-18.B4.6B.3
Yudintsev, Vadim	CA	IAC-18.C1.IP.15
Yue, Chengfei	A	IAC-18.D1.3.12
Yue, Xiaokui	CA	IAC-18.C1.2.1
Yue, Xiaokui	CA	IAC-18.D3.IP.3
Yue, Xiaokui	CA	IAC-18.A7.3.11
Yue, Yuxian	CA	IAC-18.D1.4A.5
Yue, Yuxian	A	IAC-18.D2.8-A5.4.8
Yuejiao, Wang	CA	IAC-18.A6.IP.27
Yufei, LIU	CA	IAC-18.B1.IP.1
Yule, Steven	A	IAC-18.A1.3.5
Yun, Lei	CA	IAC-18.C3.3.12
Yurong, Huo	A	IAC-18.D4.1.13
Yurong, Huo	CA	IAC-18.A6.IP.46
Yushan, GAO	CA	IAC-18.C4.10.3
Yusupova, Anna	CA	IAC-18.A1.1.10
Yusupova, Anna	A	IAC-18.A1.1.11
Yuxing, Zhang	CA	IAC-18.D2.IP.8

Z

Name	Role	Paper
Zabel, Paul	CA	IAC-18.A1.IP.4
Zabihian, Ehsan	A	IAC-18.D1.4A.9
Zabori, Balazs	A	IAC-18.A1.5.2
Zabori, Balazs	CA	IAC-18.A1.5.11
Zachrau, Hans Juergen	CA	IAC-18.A6.6.8
Zadnik, Marjan	CA	IAC-18.E1.2.11
Zaehringer, Erich	CA	IAC-18.A2.6.3
Zake, Matthias	CA	IAC-18.A6.3.9
Zakharova, Anna	A	IAC-18.B3.2.8
Zakhvatkin, Mikhail	CA	IAC-18.A6.7.5
Zakirov, Vadim	CA	IAC-18.B4.5.6
Zaklynsky, Alexander	CA	IAC-18.E5.3.8
Zaklynsky, Alexander	CA	IAC-18.E5.IP.4
Zambon, Francesca	CA	IAC-18.A3.1.12
Zamboni, Andrea	CA	IAC-18.A3.2B.2
Zamora, Pilar	A	IAC-18.D4.2.11
Zamora, Pilar	CA	IAC-18.E5.5.9
Zandbergen, Barry	CA	IAC-18.C4.8-B4.5A.6
Zander, Martin	CA	IAC-18.A6.5.3
Zander, Martin	CA	IAC-18.C3.4.3
Zanella, Pietro	CA	IAC-18.C3.4.4
Zange, Jochen	CA	IAC-18.A1.2.25
Zange, Jochen	CA	IAC-18.A1.4.2
Zannat, Sadia	CA	IAC-18.B1.IP.26
Zannoni, Marco	CA	IAC-18.B4.8.12
Zanotti Fragonara, Luca	CA	IAC-18.E2.3-GTS.4.5
Zappino, Enrico	A	IAC-18.C2.2.10
Zaquini, Nicola	CA	IAC-18.C2.IP.10
Zarb Adami, Kris	CA	IAC-18.A6.1.9
Zarcone, Gaetano	CA	IAC-18.A6.9.8
Zarubin, Dmitry	CA	IAC-18.A5.1.11
Zaussinger, Florian	CA	IAC-18.A2.6.15
Zaussinger, Florian	A	IAC-18.A2.7.18
Zavoli, Alessandro	CA	IAC-18.C1.4.5
Zawistowski, Tomasz	CA	IAC-18.B5.1.9
Zea, Luis	CA	IAC-18.A2.7.14
Zea, Luis	CA	IAC-18.A2.7.15
Zech, Herwig	A	IAC-18.B2.7.1
Zee, Robert	CA	IAC-18.B4.4.8
Zee, Robert	CA	IAC-18.C4.8-B4.5A.12
Zee, Robert E.	CA	IAC-18.B4.4.1
Zee, Robert E.	CA	IAC-18.B4.4.2
Zee, Robert E.	CA	IAC-18.B4.8.8
Zeidler, Conrad	CA	IAC-18.A1.IP.4
Zeidler, Conrad	CA	IAC-18.B3.7.14
Zeif, Reinhard	CA	IAC-18.B2.IP.18
Zeif, Reinhard	A	IAC-18.B4.6B.4
Zeif, Reinhard	A	IAC-18.B2.7.8
Zeis, Christopher	CA	IAC-18.C2.1.8
Zeis, Christopher	CA	IAC-18.D1.2.12
Zelentsov, Vladimir	CA	IAC-18.E1.3.11
Zelentsov, Vladimir	CA	IAC-18.A6.IP.45
Zelmer, Carla	CA	IAC-18.A1.6.6
Zemann, Maria	CA	IAC-18.A1.4.9
ZENG, HONG G.	CA	IAC-18.D2.6.9
ZENG, Ling-bin	A	IAC-18.D3.3.5
Zeng, Xiaomei	CA	IAC-18.C2.4.9
Zenkl, Radek	CA	IAC-18.D3.3.10
Zeppenfeldt, Frank	A	IAC-18.B2.IP.6
Zerner, Toby	CA	IAC-18.E1.4.7
Zervos, Vasilis	A	IAC-18.D5.2.10
Zhai, Huijuan	CA	IAC-18.A1.6.10
Zhai, Zhengan	A	IAC-18.B2.7.12
Zhang, Binquan	CA	IAC-18.A1.5.8
Zhang, Bo	CA	IAC-18.D4.1.5
Zhang, Bo	CA	IAC-18.D4.1.14
Zhang, Chuanxin	CA	IAC-18.D5.2.11
Zhang, Chunxi	CA	IAC-18.B2.IP.12
Zhang, Dong	A	IAC-18.D2.8-A5.4.11
Zhang, Feng	CA	IAC-18.D4.1.13
Zhang, Feng	A	IAC-18.D2.IP.17
Zhang, Han	CA	IAC-18.E2.3-GTS.4.12
Zhang, Haoping	CA	IAC-18.B5.3.10
Zhang, Hongyu	CA	IAC-18.A1.3.4
Zhang, Jia	CA	IAC-18.E5.2.3
Zhang, Jia	A	IAC-18.A6.IP.29
Zhang, Jianquan	CA	IAC-18.C3.2.2
Zhang, Jianquan	CA	IAC-18.D1.3.8
Zhang, Jianquan	CA	IAC-18.B1.4.6
Zhang, Jie	A	IAC-18.D4.1.12
Zhang, Jingnan	A	IAC-18.D1.1.7
Zhang, Jingrui	CA	IAC-18.C1.3.10
Zhang, Jinkun	CA	IAC-18.D5.1.12
Zhang, Kai	CA	IAC-18.D1.1.7
Zhang, Kefei	CA	IAC-18.A6.9.2
Zhang, Longlong	A	IAC-18.C3.IP.10
Zhang, Meng	CA	IAC-18.A1.5.8
Zhang, Nan	CA	IAC-18.C4.9.11
Zhang, Pinliang	CA	IAC-18.A6.3.1
Zhang, Qiao	CA	IAC-18.B3.9-GTS.2.8
Zhang, Rui	A	IAC-18.E2.4.3
Zhang, Ruolin	CA	IAC-18.C3.3.12
Zhang, Shenyi	CA	IAC-18.A1.5.8

Zhang, Shu	CA	IAC-18.E5.2.3
Zhang, Shuo	CA	IAC-18.B4.6A.7
Zhang, Silong	CA	IAC-18.C4.9.7
Zhang, Silong	CA	IAC-18.C4.IP.7
Zhang, Silong	CA	IAC-18.C4.IP.23
Zhang, Teng	A	IAC-18.A7.3.11
Zhang, Teng	CA	IAC-18.D1.5.7
Zhang, Wei	CA	IAC-18.A2.4.13
Zhang, William	CA	IAC-18.E2.3-GTS.4.4
Zhang, William	CA	IAC-18.A5.1.5
Zhang, William	CA	IAC-18.B4.7.9
Zhang, Xiaoyu	A	IAC-18.C2.1.1
ZHANG, Xige	CA	IAC-18.D6.3.6
Zhang, Xin	A	IAC-18.D5.3.3
Zhang, Xu	CA	IAC-18.C4.9.6
Zhang, Xuanmin	CA	IAC-18.B1.IP.12
Zhang, Yang	CA	IAC-18.D5.2.11
Zhang, Yang	CA	IAC-18.C4.5.13
ZHANG, YANG	A	IAC-18.B5.3.5
Zhang, Yao	CA	IAC-18.C1.3.10
Zhang, Yasheng	CA	IAC-18.A6.IP.46
Zhang, Ye	CA	IAC-18.A1.8.12
Zhang, Yichao	CA	IAC-18.B5.3.4
Zhang, Ying	CA	IAC-18.C4.IP.23
Zhang, Ying	CA	IAC-18.B4.7.10
ZHANG, Yonghe	CA	IAC-18.D4.1.5
Zhang, Yonghe	CA	IAC-18.D4.1.14
Zhang, Yonghe	CA	IAC-18.A7.3.11
Zhang, Yonghe	A	IAC-18.A3.4B.7
Zhang, Yuzhu	A	IAC-18.D1.IP.29
Zhang, Zezhong	CA	IAC-18.C1.IP.14
Zhang, Zhihao	A	IAC-18.C3.3.13
Zhao, Chang-Yin	CA	IAC-18.A6.IP.7
Zhao, Hua	CA	IAC-18.B2.IP.8
Zhao, Jian	CA	IAC-18.B1.1.8
ZHAO, Jian	A	IAC-18.C4.10.3
Zhao, Jianbo	CA	IAC-18.D2.5.8
Zhao, Jianfu	CA	IAC-18.A2.2.10
Zhao, Jianfu	CA	IAC-18.A2.4.6
Zhao, Jianwei	CA	IAC-18.C3.3.12
Zhao, JianWu	A	IAC-18.C3.3.12
Zhao, Jisong	A	IAC-18.D2.3.13
Zhao, Ping	CA	IAC-18.B2.IP.10
Zhao, Qing	A	IAC-18.E7.IP.21
Zhao, Sheng	A	IAC-18.D2.5.8
Zhao, Ting	CA	IAC-18.C4.1.15
Zhao, Wangbin	A	IAC-18.C3.IP.8
Zhao, Xuexuan	A	IAC-18.B4.7.4
Zhao, Yong	CA	IAC-18.B4.6A.2
Zhao, Yulong	CA	IAC-18.B2.8-GTS.3.4
Zhao, Yun	A	IAC-18.E7.4.3
Zhao, Zhihua	CA	IAC-18.C2.2.3
Zhao, Zhihua	A	IAC-18.C2.2.8
Zhaojun, Jin	A	IAC-18.A2.2.14
Zhaojun, Jin	CA	IAC-18.A2.4.13
Zhaojun, Jin	CA	IAC-18.A7.IP.3
Zhdanovich, Olga	CA	IAC-18.E1.5.1
Zhen, Huang	CA	IAC-18.A2.IP.16
Zheng, Hongwei	CA	IAC-18.A1.8.10
Zheng, Jianhua	CA	IAC-18.C1.IP.28
Zheng, Weibo	CA	IAC-18.A2.5.12
ZHENG, WEIBO	A	IAC-18.A1.8.15
ZHENG, Xiaotian	A	IAC-18.B2.3.12
Zhicheng, Wang	A	IAC-18.B1.IP.6
Zhong, Rui	CA	IAC-18.A6.10-C1.7.3
ZHONG, Xinxin	CA	IAC-18.B3.2.13
Zhou, Angelica	CA	IAC-18.A3.5.5
Zhou, Cong	A	IAC-18.D2.IP.1
Zhou, Dazhuang	CA	IAC-18.A1.5.8
Zhou, Jing	CA	IAC-18.C1.IP.24
Zhou, Jun	CA	IAC-18.C3.IP.5
Zhou, Jun	CA	IAC-18.B4.6B.2
Zhou, Jun	CA	IAC-18.B4.6B.6
ZHOU, Lini	A	IAC-18.E3.3.2
Zhou, Ning	A	IAC-18.D2.IP.6
Zhou, Wei	CA	IAC-18.A4.1.8
Zhou, Wenya	CA	IAC-18.C2.IP.31
Zhou, Wenyan	CA	IAC-18.A7.2.1
Zhou, Zhenjun	A	IAC-18.C4.IP.54
Zhou, Zhicheng	CA	IAC-18.B2.2.13
Zhu, Chengxiang	A	IAC-18.C4.9.6
ZHU, Guoqiang	CA	IAC-18.C4.IP.13
Zhu, Linyu	A	IAC-18.B4.6A.5
Zhu, Peijie	A	IAC-18.B4.6B.6
Zhu, Shengying	CA	IAC-18.C1.3.6
Zhu, Ting-Lei	CA	IAC-18.A6.IP.7
Zhu, Wen-Hong	CA	IAC-18.B3.6-A5.3.3
Zhu, Wenhui	CA	IAC-18.B2.IP.17
Zhu, Xiaobin	A	IAC-18.C4.IP.32
Zhu, Xiaozhou	A	IAC-18.B4.6A.2
Zhu, Zihua	A	IAC-18.E6.IP.7
Zhuping, Wang	CA	IAC-18.A6.IP.27
Zi, Xu	CA	IAC-18.A1.3.4
Ziegler, Bent	A	IAC-18.B2.1.4
Ziegler, Paul	CA	IAC-18.E2.3-GTS.4.1
Ziegler, Tobias	CA	IAC-18.C1.5.5
Zieliński, Kacper	CA	IAC-18.D2.IP.9
Zieliński, Kacper	CA	IAC-18.D2.9-D6.2.10
Ziemke, Claas	A	IAC-18.D1.IP.11
Zienkiewicz, Paweł	CA	IAC-18.B5.1.9
Zigo, Matej	CA	IAC-18.A6.IP.6
Zigo, Pavol	CA	IAC-18.A6.IP.6
Zimmermann, Jannik	CA	IAC-18.C2.1.8
Zimnik, Dawid	A	IAC-18.A2.IP.13
Zink, Manfred	CA	IAC-18.B1.2.4
Zolesi, Valfredo	CA	IAC-18.A1.6.5
Zoli, Luca	CA	IAC-18.C2.4.4
Zoli, Luca	CA	IAC-18.C4.3.6
Zoller, Andreas	CA	IAC-18.A1.4.5
Zong, Qiu-gang	CA	IAC-18.A7.2.1
Zong, Yan	CA	IAC-18.C3.IP.10
Zorro, Camilo Andrés	CA	IAC-18.A1.IP.39
Zorzano, María-Paz	CA	IAC-18.A2.3.7
Zorzano, María-Paz	CA	IAC-18.A3.IP.41
Zorzano Mier, Maria-Paz	CA	IAC-18.A3.3B.8
Zorzano Mier, María-Paz	CA	IAC-18.B1.3.11
Zorzoli Rossi, Elena	CA	IAC-18.E2.3-GTS.4.11
Zotti, Massimo	CA	IAC-18.B1.4.9
Zou, Shengyu	A	IAC-18.A6.IP.17
Zou, Shengyu	CA	IAC-18.A6.IP.20
Zubrin, Robert	A	IAC-18.A3.2C.11
Zummo, Giuseppe	CA	IAC-18.A1.6.9
Zuo, Jingying	A	IAC-18.C4.IP.7
Zusi, Michele	CA	IAC-18.A3.5.4

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Name	Role	Paper
Águeda Maté, Alberto	CA	IAC-18.A6.9.9

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Name	Role	Paper
Çalışkan, Duru	CA	IAC-18.E1.1.14
Çelik, Onur	A	IAC-18.C1.2.6
Çelik, Onur	CA	IAC-18.C1.9.10

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Name	Role	Paper
İpek, İdil Naz	CA	IAC-18.E1.1.14

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Name	Role	Paper
Ławrynowicz, Radosław	CA	IAC-18.B5.1.9

Ö

Name	Role	Paper
Özalp, Tamer	A	IAC-18.B4.1.3
Özçelik, Yağmur	CA	IAC-18.E1.IP.24

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Name	Role	Paper
Šeta, Berin	A	IAC-18.A2.2.8
Šeta, Berin	A	IAC-18.A2.4.5
Šimon, Jaroslav	CA	IAC-18.A6.IP.6

#MYIAC2018

Be part in our competition by uploading your own IAC 2018 Highlights video on Facebook using the hashtag #MYIAC2018

Dear IAF Community,

During this #IAC2018 in Bremen you will have the chance to tell us your IAC, who did you meet? Which events did you like the most? What was your IAC2018 experience like? Using the Hashtag #MYIAC2018 publish on Facebook your IAC 2018 Highlight video of max 3 minutes on Thursday 4th at 1pm (13h) Bremen time (CET). The most liked video by Friday 5th at 1pm (13h) Bremen time (CET) will be shown during the #IAC2018 Closing Ceremony. Good luck!

Show us your week at the IAC 2018 in Bremen!

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GLEC2019
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MARRAKECH, MOROCCO
24-26 APRIL 2019

#IAC2018 Delegates: Do not miss the **Global Conference on Space for Emerging Countries – GLEC 2019 Press Conference, on Tuesday 2 October 2018 from 17:15 – 17:45 at CCB Gallery in the Bremen Conference Center.**

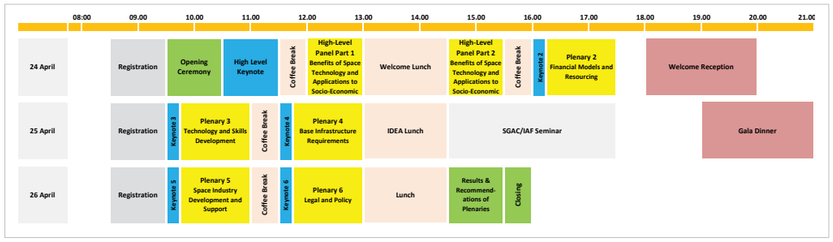
The International Astronautical Federation (IAF) together with the Centre Royal De Télédétection Spatiale (CRTS) and with the support of the Centre National D'Études Spatiales (CNES) are very proud to officially invite you to the Global Conference on Space for Emerging Countries (GLEC2019) to be held in Marrakech, Morocco from 24 to 26 April 2019.

Being the first Conference of its kind, GLEC2019 aims at actively engaging emerging countries in the global space sector by highlighting the socio-economic benefits of space applications; by understanding the various financial models for the optimal resourcing of national space programmes; by identifying opportunities for technology and skills transfer; by creating awareness about the base infrastructure requirements needed for operationalizing national space programmes and by creating awareness on the essential legislative and policy elements that must be considered in establishing the foundation for national space programmes.

High-level Keynotes and Round Tables focusing on:

- **Benefits of Space Technology and Applications to Socio-Economic Development,**
- **Financial Models and Resourcing,**
- **Technology and Skills Development,**
- **Base Infrastructure Requirements,**
- **Space Industry Development and Support,**
- **Legal and Policy.**

Conference at a glance:



IPC Co-Chairs :

Driss El Hadani
Director General, Centre Royal de Télédétection Spatiale (CRTS), Morocco

Jean-Pascal Le Franc
Director of Planning, International Relations & Quality, Centre National d'Études Spatiales (CNES), France

Valanathan Munsami
VP: Developing Countries and Emerging Countries, IAF, Chief Executive Officer (CEO), South African National Space Agency (SANSA), South Africa

For more information:

Website: www.glec2019.org

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By becoming an IAF Member, your organization will also gain a worldwide visibility and will have access to a global networking of potential business partners, experts and decision-makers, among many other benefits.

Visit www.iafastro.org/membership/ and contact us at info@iafastro.org to find out how to join the IAF movement!

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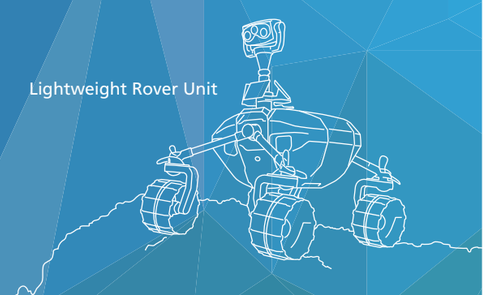
The German Aerospace Center (DLR) is the national aeronautics and space research centre of the Federal Republic of Germany. Its extensive research and development work in aeronautics, space, energy, transport, security and digitalisation is integrated into national and international cooperative ventures. In addition to its own research, as Germany's space agency, DLR has been given responsibility by the federal government for the planning and implementation of the German space programme. DLR is also the umbrella organisation for the nation's largest project management agency.

DLR has approximately 8000 employees at 20 locations in Germany: Cologne (headquarters), Augsburg, Berlin, Bonn, Braunschweig, Bremen, Bremerhaven, Dresden, Göttingen, Hamburg, Jena, Jülich, Lampoldshausen, Neustrelitz, Oberpfaffenhofen, Oldenburg, Stade, Stuttgart, Trauen, and Weilheim. DLR also has offices in Brussels, Paris, Tokyo and Washington D.C.

Visit us at booths 5D50 and 5D15

DLR.de



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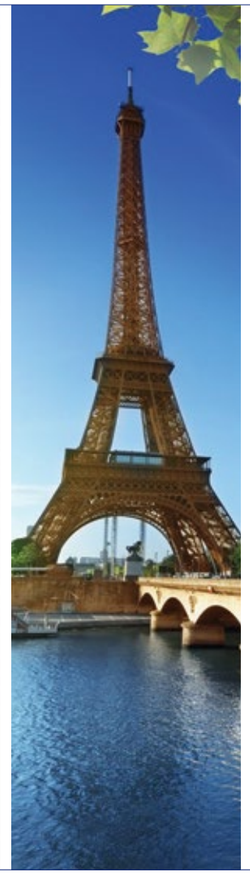

Spring Meetings 2019

Are you an IAF Member?
Are you in an IAF Committee?

If yes, as each year, the IAF is pleased to invite you to its Spring Meetings taking place in Paris, France where the IAF community will get together for three days, from 26 – 28 March 2019.

Contact us on info@iafastro.org to find out more.

ISF 2018 INTERNATIONAL SPACE FORUM AT MINISTERIAL LEVEL LATIN AMERICAN CHAPTER

Organizers:

3rd International Space Forum 2018 - The Latin American Chapter

Space Science and Academia for better Solution to Latin America's Challenges.

Buenos Aires, Argentina | 1 November 2018

Venue: *Centro Cultural de la Ciencia | Avenida Godoy Cruz 2320, C1425FQD, Buenos Aires*

The third edition of the International Space Forum – the Latin American Chapter (ISF 2018) – is expected to bring together Latin American Ministers of Education, Science and Research, Heads of Space Agency, representatives of Universities and Academia involved in space activities, as well as members of International Space Organizations, with the aim to encourage the discussion on how Space education and technology can support the understanding and exploitation of space benefits to help solving some of Latin American's challenges.

3 Keynote Speeches on:

- Management of Natural Resources and Prevention of Disasters
- Space Partnerships
- Education and Capacity Building

Contact: spaceforum@iafastro.org

Be part of the conversation @iafastro and #ISFBuenosAires

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