



IP Competition Shortlisted



Category	IP Code	Name	Country	Presentation Title	Symposium
A - Science and Exploration	IAAC-19/A1/IP.5	Dr. 54993 Mr. Simon Engler	United States	Results from HI-SEAS Long Duration Mars Analog Simulations	A1 Symposium A1 - IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM
	IAAC-19/A1/IP.6	Dr. 49849 Mrs. Jonna Ocampo	United States	Nasa human exploration research analog (hera) research study assesses crew fitness for long-duration space travel	A1 Symposium A1 - IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM
	IAAC-19/A1/IP.10	Dr. 53884 Mr. Jeremy Rabineau	Belgium	Cardiovascular deconditioning during two months of bed rest: Comparison of wearable monitoring based on ballisto- and seismo-cardiography with MRI	A1 Symposium A1 - IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM
	IAAC-19/A3/IP.12	Dr. 50251 Mr. Maneesh Kumar Verma	The Netherlands	mission concept for lunar low frequency antennas for radio astronomy (lufar)	A3 Symposium A3 - IAF SPACE EXPLORATION SYMPOSIUM
	IAAC-19/A5/IP.15	Dr. 55016 Mr. Samuel Kimeses	United States	From Dust to Gas, LEAP2 Technologies for Lunar Site Development at the Marius Hills Skyfall	A3 Symposium A3 - IAF SPACE EXPLORATION SYMPOSIUM
	IAAC-19/A4/IP.1	Dr. 55126 Dr. Jill Tarter	United States	Technosearch.seti.org: The Future of the Past: The Promise of the Future	A4 Symposium A4 - 48th IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) - The Next Steps
	IAAC-19/A4/IP.3	Dr. 52287 Mr. Lori Walton	Canada	The Search for Resource Extraction Technosignatures in the Solar System	A4 Symposium A4 - 48th IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) - The Next Steps
	IAAC-19/A5/IP.3	Dr. 53463 Prof. Geraldo Magela Couto Oliveira	Brazil	Finding trajectories to send a spacecraft to an asteroid to change its orbit around the Sun	A5 Symposium A5 - 22nd IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM
	IAAC-19/A5/IP.4	Dr. 49061 Ms. Alina Kunitskaya	Canada	Oxygen Production on Mars with In-Situ Resource Utilization	A5 Symposium A5 - 22nd IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM
	IAAC-19/A5/IP.5	Dr. 50100 Mr. Jeffrey Nosonov	United States	PERSEUS: PERseus Subsurface Cave Optical Explorer: lunar cave characterization from orbit	A5 Symposium A5 - 22nd IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM
	IAAC-19/A6/IP.20	Dr. 53728 Mr. Luis Sanchez	United Kingdom	AI to Support Decision Making in Collision Risk Assessment	A6 Symposium A6 - 17th IAA SYMPOSIUM ON SPACE DEBRIS
	IAAC-19/A6/IP.6	Dr. 50362 Mr. Harvey Reed	United States	Blockchain Enabled Space Traffic Awareness (BESTA)	A6 Symposium A6 - 17th IAA SYMPOSIUM ON SPACE DEBRIS
	IAAC-19/A6/IP.13	Dr. 53781 Dr. Alexis Pettit	Italy	Collision risk assessment for the proposed large constellations Knowledge Utilization and Open Policies: Noble aims that ensure quality research or Opening discoveries like a pizza ?	A6 Symposium A6 - 17th IAA SYMPOSIUM ON SPACE DEBRIS
	IAAC-19/A7/IP.3	Dr. 50665 Ms. Julia Heurtsch	Germany	Solar frequency interference: using deep learning tools to mitigate the impact to space operators	A7 Symposium A7 - IAF SYMPOSIUM ON FUTURE SPACE ASTRONOMY AND SOLAR-SYSTEM SCIENCE MISSIONS
	IAAC-19/A7/IP.4	Dr. 54319 Mr. Zaid Rana	Canada	Collision risk assessment for the proposed large constellations Knowledge Utilization and Open Policies: Noble aims that ensure quality research or Opening discoveries like a pizza ?	A7 Symposium A7 - IAF SYMPOSIUM ON FUTURE SPACE ASTRONOMY AND SOLAR-SYSTEM SCIENCE MISSIONS
	B - Applications and Operations	IAAC-19/B1/IP.4	Dr. 50943 Mr. Saeed Al Mansouri	United Arab Emirates	Automatic Ship Detection from High Resolution Satellite Images based on a Deep Convolutional Neural Network (DCNN) Model
IAAC-19/B1/IP.5		Dr. 50289 Ms. Elise Wright Knutsen	Norway	Microwave observations of mesospheric ozone loss over Antarctica associated with auroral precipitation	B1 Symposium B1 - IAF EARTH OBSERVATION SYMPOSIUM
IAAC-19/B1/IP.12		Dr. 51685 Ms. Shaikha AlBeshir	United Arab Emirates	Monitoring and Predicting the Land Use and Land Cover Changes from Multi-Temporal DubaiSat-2 Data using Remote Sensing and GIS techniques. A Case Study of Al Marmoom Desert Conservation Reserve	B1 Symposium B1 - IAF EARTH OBSERVATION SYMPOSIUM
IAAC-19/B3/IP.3		Dr. 49796 Mrs. Yumi Ohama	Japan	Astronaut Resilience Training for the Future Manned Space Mission	B3 Symposium B3 - IAF HUMAN SPACEFLIGHT SYMPOSIUM
IAAC-19/B3/IP.2		Dr. 49618 Mr. Bradley Hoffmann	United States	An Eye on the Horizon: Analog Mars Rover Localization and Autonomous Detection	B3 Symposium B3 - IAF HUMAN SPACEFLIGHT SYMPOSIUM
IAAC-19/B3/IP.1		Dr. 50341 Dr. Ondrej Doule	United States	Adjustable IVA Spaceluit Ergonomics. A) Upper Body Motion Envelope Reference Model	B3 Symposium B3 - IAF HUMAN SPACEFLIGHT SYMPOSIUM
IAAC-19/B4/IP.4		Dr. 51922 Mr. Diego Nodar	Spain	Flight results of an advanced multiband communication SDR payload in LUME-1 satellite	B4 Symposium B4 - 26th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS
IAAC-19/B4/IP.8		Dr. 53270 Dr. Vladimir Ten	Kazakhstan	First in-orbit results from kazstsat	B4 Symposium B4 - 26th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS
IAAC-19/B4/IP.24		Dr. 54048 Mr. Sergio Trapalejo Rivera	Brazil	On-board management of autonomous formation flying missions in Proba-3 mission	B4 Symposium B4 - 26th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS
IAAC-19/B6/IP.11		Dr. 49638 Ms. Elia Herz	United States	Optimized Contact Scheduling for NOAA Search and Rescue	B6 Symposium B6 - IAF SPACE OPERATIONS SYMPOSIUM
IAAC-19/B6/IP.9	Dr. 54547 Mr. Sean Stellingwerff	Germany	Using UX design techniques to increase the efficiency and confidence of mission operators	B6 Symposium B6 - IAF SPACE OPERATIONS SYMPOSIUM	
IAAC-19/B6/IP.10	Dr. 52167 Mr. Jason Long	United States	The Analysis and Potential of High Reliability Organization Principles in NOAA Satellite Operations	B6 Symposium B6 - IAF SPACE OPERATIONS SYMPOSIUM	
C - Technology	IAAC-19/C1/IP.11	Dr. 51656 Mr. Kent Yoshikawa	Japan	Hayabusa2 operational design and evaluation of MINERVA-IIA/B rovers deployment	C1 Symposium C1 - IAF ASTRODYNAMICS SYMPOSIUM
	IAAC-19/C1/IP.7	Dr. 50351 Dr. Joan Pau Sanchez Cuartielles	United Kingdom	ESA F-Class Comet Interceptor: A first close-up study of a dynamically J1new, AU object	C1 Symposium C1 - IAF ASTRODYNAMICS SYMPOSIUM
	IAAC-19/C1/IP.15	Dr. 53334 Mr. Juan Carlos Bastante	Germany	Qualitative and quantitative characterisation of solutions for the low thrust transfer GTO to GEO	C1 Symposium C1 - IAF ASTRODYNAMICS SYMPOSIUM
	IAAC-19/C2/IP.9	Dr. 53091 Dr. Jihnyuk Kim	Korea, Republic of	Vibration test for 7-ton-class liquid propellant rocket engine	C2 Symposium C2 - IAF MATERIALS AND STRUCTURES SYMPOSIUM
	IAAC-19/C2/IP.12	Dr. 51359 Mr. Harry Byers	United States	Integration of a Reaction Wheel System into a Sounding Rocket to Increase Stability and Performance	C2 Symposium C2 - IAF MATERIALS AND STRUCTURES SYMPOSIUM
	IAAC-19/C2/IP.21	Dr. 54524 Ms. Inna Uwarowa	Poland	PKWAZ2 DEBRIS SAT TEST CAMPAIGN AT DROP TOWER and verification on orbit	C2 Symposium C2 - IAF MATERIALS AND STRUCTURES SYMPOSIUM
	IAAC-19/C3/IP.1	Dr. 54845 Mr. Victor Perez	United States	Development of CubeSat Electric Power System Simulator with Complex Geometry	C3 Symposium C3 - IAF SPACE POWER SYMPOSIUM
	IAAC-19/C3/IP.5	Dr. 51702 Mr. Valerio Giuliani	Italy	Hardware Architecture of Electrical Power System for 3U hyperspectral Imaging CubeSat	C3 Symposium C3 - IAF SPACE POWER SYMPOSIUM
	IAAC-19/C3/IP.6	Dr. 54356 Mr. Nihal Singh	India	Development of Adaptable Electrodesless Plasma Propulsion Systems Using Evolutionary Topology Optimisation and Particle in Cell Simulation	C3 Symposium C3 - IAF SPACE POWER SYMPOSIUM
	IAAC-19/C4/IP.9	Dr. 51982 Mr. Alexander Ryan	Australia	The P-5 Engine: A Costa Rican, Cost-effective, Low Power Liquid-Rocket Engine	C4 Symposium C4 - IAF SPACE PROPULSION SYMPOSIUM
IAAC-19/C4/IP.10	Dr. 50933 Mr. Roy Ramirez	United States	development and validation of high-performance hypergolic hybrid rocket fuel ignitor with hydrogen peroxide	C4 Symposium C4 - IAF SPACE PROPULSION SYMPOSIUM	
IAAC-19/C4/IP.14	Dr. 50231 Mr. Junyeong Jeong	Korea, Republic of	development and validation of high-performance hypergolic hybrid rocket fuel ignitor with hydrogen peroxide	C4 Symposium C4 - IAF SPACE PROPULSION SYMPOSIUM	
D - Infrastructure	IAAC-19/D1/IP.2	Dr. 51791 Mr. Dong Yang	China	Modular Architecture Design and Evaluation of Large Spacecraft The Open Source Satellite: Spinning in „A6best-of-Breed“ Au space and terrestrial innovations to Spin-Out affordable new mission ideas	D1 Symposium D1 - IAF SPACE SYSTEMS SYMPOSIUM
	IAAC-19/D1/IP.3	Dr. 50820 Mrs. Anita Bernie	United Kingdom	Evaluation of the Learning Process of a Data-Driven Systems Engineering Methodology in a Workshop Environment	D1 Symposium D1 - IAF SPACE SYSTEMS SYMPOSIUM
	IAAC-19/D1/IP.5	Dr. 48738 Mr. Paolo Guardabasso	Portugal	Comparative analysis of upper stage and built-in propulsion system for GEO satellite launches	D2 Symposium D2 - IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM
	IAAC-19/D2/IP.8	Dr. 50706 Mr. Roman Mykhalchshyn	Ukraine	The design and development of a medium-scale liquid commercial launch vehicle named "p2 based on liquid oxygen and liquid methane propulsion system	D2 Symposium D2 - IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM
	IAAC-19/D2/IP.2	Dr. 54580 Mr. Yawei Xu	China	Fesibility of an automated streamlined body for launch vehicles and Leo transportation	D2 Symposium D2 - IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM
	IAAC-19/D2/IP.9	Dr. 54097 Mr. Pratik Sarkar	India	Incorporating Sustainability into Planned Lunar Missions: Building Blocks for Lunar Settlement through Lunar Sustainability Goals	D3 Symposium D3 - 17th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT
	IAAC-19/D3/IP.3	Dr. 50245 Mr. Scott Ritter	France	Modular Field Robots for Extraterrestrial Exploration	D3 Symposium D3 - 17th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT
	IAAC-19/D3/IP.5	Dr. 52544 Mr. Troy Cordie	Australia	New supply chain methods using blockchain, 'Next Generation of Phobos and Mars Orbit as a Base for Main Belt Asteroid Mining	D4 Symposium D4 - 17th IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE
	IAAC-19/D4/IP.6	Dr. 54865 Mr. Pavlo Tanasyuk	United Kingdom	Phobos and Mars Orbit as a Base for Main Belt Asteroid Mining	D4 Symposium D4 - 17th IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE
	IAAC-19/D4/IP.7	Dr. 49599 Dr. Martin Elvis	United States	Project HELIOS Phase I: The Extraction of Helium-3 in Lunar Regolith	D4 Symposium D4 - 17th IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE
IAAC-19/D4/IP.9	Dr. 53578 Mr. Benjamin Wong	Canada	Project HELIOS Phase I: The Extraction of Helium-3 in Lunar Regolith	D4 Symposium D4 - 17th IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE	
E - Space and Society	IAAC-19/E1/IP.33	Dr. 51330 Mr. Andreas Hornig	Germany	NASA's International Space Apps Challenge: 6 years of global hack	E1 Symposium E1 - 32nd IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS
	IAAC-19/E1/IP.1	Dr. 49730 Dr. Jancy McPhee	United States	The Project Mars Competition: Engaging the Public in Space	E1 Symposium E1 - 32nd IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS
	IAAC-19/E1/IP.12	Dr. 49315 Ms. Ruth May	United States	From Spaceflight Hardware to University Student Design: How It Works	E1 Symposium E1 - 32nd IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS
	IAAC-19/E3/IP.2	Dr. 52005 Mr. Mustafa Eleyewa Agbadi	Nigeria	Bridging the Gap of Space Infrastructure Deficit in Africa through	E3 Symposium E3 - 31st IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS
	IAAC-19/E3/IP.4	Dr. 52050 Dr. Frank Jansen	Germany	MARS/EUROPA INPPS. All right for UN NPS Principles	E3 Symposium E3 - 31st IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS
	IAAC-19/E3/IP.9	Dr. 50111 Dr. Sara Langston	United States	Legal Enforcement 2.0: Legal and Ethical Considerations for Policy	E5 Symposium E5 - 30th IAA SYMPOSIUM ON SPACE AND SOCIETY
	IAAC-19/E3/IP.10	Dr. 50999 Mr. Simon Jenner	Australia	Without Space	E5 Symposium E5 - 30th IAA SYMPOSIUM ON SPACE AND SOCIETY
	IAAC-19/E5/IP.2	Dr. 54120 Mr. David Lopez	United States	SCRUM and the Art of International Space Law	E5 Symposium E5 - 30th IAA SYMPOSIUM ON SPACE AND SOCIETY
	IAAC-19/E5/IP.6	Dr. 54382 Mr. Mirale Israel Nazario	Sweden	Space solution to world A&S water crisis: a case study with remote sensing, science and technology in synergy	E5 Symposium E5 - 30th IAA SYMPOSIUM ON SPACE AND SOCIETY
	IAAC-19/E6/IP.1	Dr. 49770 Ms. Maria-Gabriella Sarah	France	ESA partnerships: a risky business?	E6 Symposium E6 - IAF BUSINESS INNOVATION SYMPOSIUM
	IAAC-19/E6/IP.5	Dr. 49867 Ms. Helen Tung	Australia	Role of insurance in mitigation risk in space operations - focusing particularly on NewSpace	E6 Symposium E6 - IAF BUSINESS INNOVATION SYMPOSIUM
	IAAC-19/E7/IP.15	Dr. 50581 Mr. Joshua Burks	United States	Who Owns this Space? A Survey of Space Industry Leaders and Legal Experts Assessing Space Property Rights Issues and Potential Resolutions	E7 Symposium E7 - IISL COLLOQUIUM ON THE LAW OF OUTER SPACE
	IAAC-19/E7/IP.6	Dr. 50678 Dr. Marina Gagliardi	Italy	Small satellites and regulation: a general overview with a specific reference to the Italian context.	E7 Symposium E7 - IISL COLLOQUIUM ON THE LAW OF OUTER SPACE
IAAC-19/E7/IP.11	Dr. 50855 Ms. Mahshid TalebianKiakiaiyeh	Iran	Relevance of Militarized Artificial Intelligence to Sovereignty in Space: Legal Challenges and Conflicts	E7 Symposium E7 - IISL COLLOQUIUM ON THE LAW OF OUTER SPACE	