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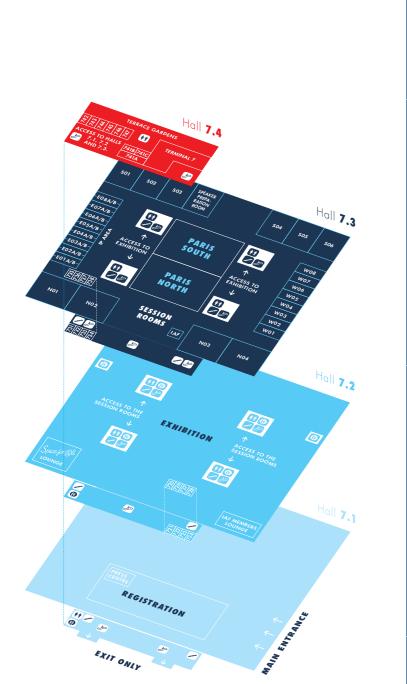


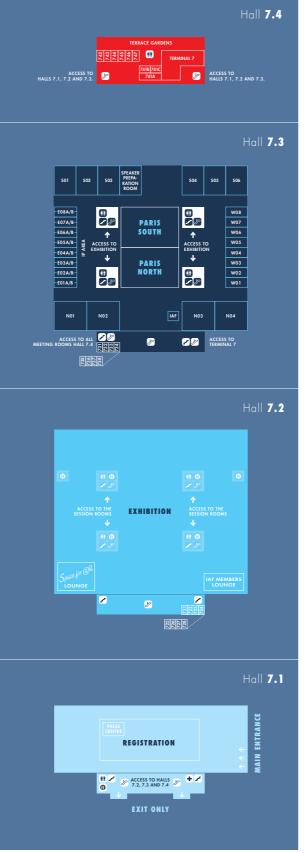
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Students and Young Professionals Events 1

1.1 2022 IPMC Young Professional Workshop

Date:	Saturday 17 September 2022
Time:	09:00 - 18:00
Venue:	Room W04, Level 3, Hall 7, Paris Convention

The Final Event of the 2022 IPMC Young Professionals Workshop will take place on Saturday 17 September.

All Delegates attending the IAC are welcome to join the event during topics pitches and debate.

The IAF's International Project/Programme Management Committee (IPMC) established this workshop to gather inputs from young professionals in the international space community on how to bridge the generational gap in the workplace and on how to better develop and empower the next-generation workforce.

This year, the workshop will cover the following topics:

- Topic 1 Commercial space: challenges and opportunities for Project Management How do commercial space projects differ from institutional ones? Which new challenges and opportunities meet the Project Manager in this context? What is most
- Topic 2 Delivering digital transformation and building Digital Governance in an ESG-focused world What are the effects and consequences of digital transformation on space projects? Which new responsibilities are added to the PM's mandate? How to best implement digital transformation at both process and product/service level while at the same time ensuring proper Digital Governance?
- Topic 3 Project management in a VUCA world: effects on the workforce wellbeing What are the effects of rapid and unexpected change on the space workforce? Which is the role of project managers in navigating the VUCA world? How can PMs positively affect workload management and team members' well-being?
- Topic 4 Space projects without frontiers: how to leverage cooperation and organizational diversity What are the roles and effects of organizational diversity in space projects? What accelerates and enhances collaboration among diverse organizations? How can organizational diversity be effectively governed?
- Topic 5 Sustainability of space projects Which sustainability axis is most relevant to Young Professionals in the space field and why? What is the interplay between space project management and international sustainable development goals? How can PMs contribute to more sustainable space activities?







n Centre





The observations and recommendations from the topic working groups will be presented and discussed on Saturday, September 17th.

Time	Session
09:00 - 09:10	IPMC YP Workshop opening and welcome
09:10 - 09:45	Teams preparation
09:45 - 10:30	Keynote
10:30 - 10:45	Coffee Break
10:45 - 11:30	Topic presentation + debate
11:30 - 12:15	Keynote
12:15 – 13:15	Group photo & Lunch Break
13:15 - 14:00	Topic presentation + debate
14:00 - 14:45	Topic presentation + debate
14:45 - 15:30	Keynote
15:30 - 15:45	Coffee Break
15:45 - 16:30	Topic presentation + debate
16:30 - 17:15	Topic presentation + debate
17:15 – 17:30	Closing
19:00 - 21:00	YPP Reception

1.2 IAF Young Professionals Events

Saturday 17	September 2022	
08:30 - 13:30	Cross Cultural Communications and Presentation	
09:00 - 18:00	IPMC Young Professional Workshop – Room W04	
19:00 - 21:00	Welcome Networking Reception – Room N02 (For	
	Come mix and mingle with fellow YPs as the IAF's including a welcome from the IAF to Paris.	
Monday 19 September 2022		
19:00 – 21:00	Reception for Launchpad Mentorship Programme A closed reception for the mentors and mentee Mentoring Join us for the opportunity for speed mentoring Networking and reception will follow. Sponsored by:	

Tuesda	y 20 Se	ptember	2022
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19:00 - 21:00

Join us for a night focusing on space educational offerings and how you can get involved with our organisations. Networking and reception to follow.

Sponsored by:









Workshop – Room W03

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- Young Professionals Only)
- Young Professionals Programme welcomes you to IAC 2022,

e – Room NO2 (For Young Professionals Only) ees in the program Launchpad Programme and YPP: Speed

; with industry leaders about how to navigate your career.

Joint YPP/ISU/SGAC Event - Room N02 (For Young Professionals Only)





1.3 IAF Grant and Recognition Programmes for Students and YPs

1.3.1 IAF Young Space Leaders (YSL) Recognition Programme

The IAF Young Space Leaders Recognition Programme is awarded to exceptional students and young professionals, who contribute to astronautics in their academic or early careers, reach out to other young people and their communities to share knowledge and experiences, have been engaged with the international space community and contribute to IAF activities.

The 2022 IAF Young Space Leaders were chosen by a selection committee during the IAF Spring Meetings in March. They will be presented with their award during the Closing Ceremony of the 73rd International Astronautical Congress (IAC) - IAC 2022 - in Paris, France which will take place from 18 - 22 September 2022. Awardees also attend the IAC Gala Dinner as guests of the IAF President and enjoy a free IAC registration.



Sirisha BANDLA

Vice President, Government Affairs and Research Operations, Virgin Galactic

Sirisha Bandla currently works as the Vice President of Government Affairs and Research Operations for Virgin Galactic. In this role, Sirisha oversees legislative, regulatory, and government business priorities for the company, as well as work with research customers to fly science and technology experiments on VG's SpaceShip class of vehicles.

Previously, Sirisha served as the Associate Director for the Commercial Spaceflight Federation, an industry association of commercial spaceflight companies. At CSF, Sirisha worked on various policies with the aim to promote and enable the then emerging commercial space industry. Before CSF, she worked as an aerospace engineer designing components for advanced aircraft at L-3 Communications in Greenville, Texas.

Sirisha has a Bachelors of Science degree in aeronautical/astronautical engineering from Purdue and holds a Masters of Business Administration from the George Washington University. Sirisha serves on the Board of American Society for Gravitational and Space Research, American Astronautical Society, and the Future Space Leaders Foundation. Sirisha also helps to organize the Matthew Isakowitz Fellowship Program, an internship and mentorship program that provides summer opportunities to current college juniors, seniors, and graduate students passionate about commercial spaceflight.



Dunay BADIRKHANOV

Vice chairman of Azercosmos Space Agency of the Republic of Azerbaijan

Dunay Badirkhanov joined Azercosmos in 2011 as a member of core team to receive international trainings in satellite engineering and operations in order to get prepared for the launch and operations of the first satellite of Azerbaijan – Azerspace-1.

As a Satellite Operations Manager since 2013 he coordinated the development of the concept of operations, in order to support satellite telecommunications services. In 2014 Dunay participated in the development of earth observation infrastructure of Azercosmos in scope of the launch of Azersky - the second satellite of Azercosmos.

Since 2016, as a Director of Satellite and Ground-based Systems Department, he managed the process of preparation for the launch of Azerspace-2 satellite, which took place in 2018.

After he was appointed as a Vice-chairman of Azercosmos in 2018, Dunay acts as a Chief Technology Officer and also supports the space agency in building international relationships. Dunay is an active member of Space Communications and Navigation Committee of International Astronautical Federation. He is an IPC Co-chair for IAC 2023 event to be hosted in Baku.

Apart from that, Dunay is actively cooperating with various schools and universities to raise awareness about everything-space among the younger generation and encourage them to participate in space-related activities in Azerbaijan. He manages the process of establishment of training programs in local universities in the fields of aerospace and satellite applications.

Dunay received a MSc degree in Mechanics from St. Petersburg University in 2009.



Ozan KARA

Senior Propulsion Engineer, DeltaV Space Technologies Inc.

Kara is Senior propulsion engineer in DeltaV Space Technologies Inc., Istanbul, Turkey. His expertise is the development of hybrid rocket technologies by using paraffin wax-based fuels. He developed a novel propulsion system for in-situ Martian rockets

In addition, he has performed various of researches in space community such as CubeSat Communication, small satellite Moon mission design and virulence alteration of bacteria aboard the ISS. Dr. Kara is member of Space Propulsion, Space Education and Outreach and Young Professional committees at the International Astronautical Federation. He was Young Professional Delegate of IPMC Workshop several times. He is also a member of the American Institute of Aeronautics and Astronautics. Dr. Kara was the Middle East Regional Coordinator at the Space Generation Advisory Council between 2018 – 2020. He is an amateur photographer focusing on action photography such as rocket launches, fighter jets and F1 cars. He is a rower and swimmer, plays volleyball and tennis.

Mariam NASEEM

Member of the Industry Relations team, Canadian Space Agency



Mariam currently works with the Canadian Space Agency serving Canada's commercial space sector through business development and policy initiatives as a member of the Industry Relations team. She is also a Visiting Scholar at the Blue Marble Space Institute of Science working on science communication projects and is collaborating on planetary science research pertaining to Ocean Worlds with a scientist at NASA Goddard.

Mariam has a BSc. in Electrical Engineering from UT Austin and an MBA from the University of Toronto. She brings a global and multi-disciplinary background to the space sector, having worked as a commercial space consultant, as a technology strategist in the Enterprise Innovation team at one of the largest banks in Canada, as a field engineer on an oil rig in Russia, a manufacturing engineer in a Product Development center in Texas and as a business development manager for a Toronto-based Quantum computing startup.

Mariam strives to support and mentor the next generation of space leaders through various non-profit activities. She serves as a coordinator for the International Astronautical Federation's Next Generation Plenary (NGP) Steering Committee organizing the NGP at IAC under the auspices of IAF's Workforce Development-Young Professionals Programme. Mariam is also a SEDS-Canada Advisory Board member and on the Space Generation Advisory Council's Mentoring Committee.

Antonino SALMERI

Doctoral Researcher in Space Law, University of Luxembourg

Antonino Salmeri is an Italian space lawyer specialized in the governance of lunar activities and the regulation of space resources. Since 2019, Mr. Salmeri works as doctoral researcher in space law at the University of Luxembourg and he is also a registered attorney at the Italian BAR. He holds three advanced degrees in law and is about to complete a PhD on the regulatory aspects and enforcement options of space mining. His main expertise is in the development of adaptive governance mechanisms and innovative policy solutions for the peaceful, cooperative, safe and sustainable conduct of lunar and space resource activities.

Mr. Salmeri holds several key positions within the space community, including: - Policy & Advocacy Coordinator at Space Generation Advisory Council, where he also leads the EAGLE Team on Lunar Governance; - Convener of the Moon Dialogs Initiative; - Member of the Global Expert Group on Sustainable Lunar Activities (GEGSLA), where he also co-chairs the specialised group on Lunar Information Sharing; - Individual Governing Member and Alumnus of the International Space University; - Member of the International Institute of Space Law, where he also serves as Global Outreach Manager for the Knowledge Constellation project; - Member of the Space Habitats Committee of the International Astronautical Federation; - Co-Director of the Article XI Project, a joint venture between the EAGLE Team and the Global Space Law Center on enhanced information sharing practices for space activities; - Director of the Luxembourg Space Café Series, in cooperation with the Luxembourg Space Agency and the Luxembourg Space Federation











Ruvimbo SAMANGA Space Law and Policy Analyst

Ruvimbo Samanga is an attorney, legal scholar, and policy analyst with a master's degree in International Trade and Investment Law. She has been awarded prominently for her leadership in the emerging African space economy. She is a Mandela-Rhodes Scholar, a Ban Ki-Moon Global Citizen Scholar, and a Robert Bosh Fellowship holder for the European Forum Alpbach. She has been recognised as an African Emerging Space Leader by the Space Generation Advisory Council, a Top 10 Under 30 in the African space industry by Space in Africa, and a Top Talent Under 25 in the World by the German Magazine GenZEO. A Research Fellow at the Open Lunar Foundation, she also co-hosts the podcast and blog newmoon. She volunteers at IAF'S Space Traffic Management Committee and Subcommittee of New Technical Regulations, The Space Court Foundations legal methodology team, and the Tod'Aers Sustainable Space Studies Research Organisation. Ruvimbo was part of the first African team and winner of the 2018 International Manfred Lachs Space Law Moot Competition, which dealt with planetary defense issues and liability for damages caused in outer space. She was also instrumental in launching the first space education E-curriculum in Zimbabwe, Astro Zimba, and now currently manages her time between her research and her early-stage geospatial start up AgriSpace.



Maruška STRAH

Executive Director, World Space Week Association

Maruška Strah is passionate about space and space law ever since she read her first chapter on international space law. Her interest only deepened during her work at the United Nations Office for Outer Space Affairs, where she gained significant insight in the work of both, public and private sector involved with the space industry. Her main area of interest is Space Traffic Management. Her enthusiasm and passion for space will lead her to bringing space closer to people, especially youth and women, working in space and STE(A)M. Maruška is pursuing a PhD in Legal Studies at the Law Faculty of the University of Vienna, where she is focusing her research on Space Traffic Management. In 2022, Maruška was selected for the prestigious IAF Young Space Leader award.

Maruška gained practical experience working for the Permanent Mission to the Organization for Security and Cooperation in Europe of the Republic of Slovenia and the European Union Affairs and International Cooperation Service at the Ministry of Health of the Republic of Slovenia. As a procurator of a medical institute, she has obtained unique experience combining practical approach to health in terms of both, user and provider, and combined them both with the experience she gained during her work with international organizations. In 2014, she founded a company Family Clinic d.o.o., determined to facilitate health services, focused on preventive measures and support of lifestyle changes. She is a trained Peer Mediator and has experience in the field of conflict management. She is an experienced journalist and wrote for the Vienna Review as the Politics Editor during her studies.

She earned bachelor's degree in international relations and media communications from Webster University Vienna, where she also earned the title Master of Arts in International Relations. Her final work was titled "Comparison of Luxembourg, United States of America and People's Republic of China Space Law Changes."

Maruška is a member of the International Institute of Space Law, where she is the Co-Chair of the Space Traffic Management Working Group. She is also a member of the International Association for the Advancement of Space Safety and the European Center for Space Law. Maruska is also a part of the American Institute of Aeronautics and Astronautics Space Traffic Management Working Group 1, where she is leading the efforts to socialize the outcomes of the working group, and the International Astronautical Federation Space Traffic Management Committee.



Anthony YUEN

Chair, Space Generation Advisory Council (SGAC)

Anthony Yuen is an engineer, physician, clinical informaticist and space medicine researcher, working to translate emerging technologies into effective solutions in the healthcare and space industries. He currently serves as the Chair of the Space Generation Advisory Council (SGAC), leading the largest global network of students and young professionals in the space sector. Professionally, he is an Assistant Professor at Weill Cornell Medicine / New York Presbyterian Hospital in New York City, and is a member of several professional and technical committees in space medicine and life sciences at the United Nations, International Astronautical Federation, and American Institute of Aeronautics and Astronautics. Anthony earned his medical degree (MD) and his Bachelor of Engineering in Mechanical and Space from the University of Queensland in Brisbane. Australia.

1.3.2 IAF Emerging Space Leaders (ESL) Grant Programme

These 30 students and young professionals were chosen by the IAF Emerging Space Leaders Sub-Committee composed of nine high experienced space stakeholders. They will travel to Paris in September 2022 to participate in the IAC and have the opportunity to extend their network, gain knowledge and meet space experts!



Adewale ADELANWA

Adewale is an analyst and consultant at Space in Africa. He is a researcher and market intelligence analyst covering the African space industry. He develops reports encompassing data-driven analysis, feasibility studies, and industry landscape which open clients (private and public space organizations) to new opportunities. Additionally, he provides consulting services for satellite development programs, including recommending state-of-the-art satellite technology, launch opportunities, and commercialization of satellites.

He believes that international cooperation in space is the second global initiative that unites the World after football, where different nations come together to achieve a common goal. For instance, the International Space Station (ISS) program is a synergy of international flight crews, globally distributed launch, operations, training, engineering, development facilities; communications networks, and the global scientific research community. In addition, he believes that international cooperation is a vital key and opportunity for non-space faring nations (e.g, developing African countries) that do not possess the wherewithal (financial, technical capacity) to develop their space program. These nations have leveraged such international partnerships to kickstart their space journey by developing space infrastructures (satellites and other related technologies). For example, the KiboCUBE initiative, a program by the United Nations Office for Outer Space Affairs (UNOOSA) and the Japan Aerospace Exploration Agency (JAXA) and UNOOSA/Airbus-Bartolomeo Program has helped several countries, including, Egypt, Kenya, Mauritius, Uganda and Tunisia, to develop space asset and granted them access to space resources (e.g Earth observation data) to solve their peculiar socio-economic and environmental challenges.



Lama ALORAIMAN

Mechanical Engineering student at the American University of the Middle East.

Advisory Council (SGAC), and the National Coordinator of the World Space Week Association.

community

large scale events locally and internationally to raise awareness on the importance of space exploration.

member state in the committee in 2022

Tensae ALI



Immersed in the concept of Space Science and Engineering at a young age, he derived himself to take part in the space sector aided by wisdom and leadership. Tensae Alemayehu Ali is a Mechanical Engineering graduate from Mekelle University. He is currently working as the Regional Coordinator for Africa at the Space Generation Advisory Council (SGAC). Formerly, he has worked as SGAC's Regional and Local Events Coordination Team and as the National point of contact for Ethiopia. At national level, he has Co-Chaired the Executive Mekelle Branch office of the Ethiopian Space Science Society (ESSS). He has carried out remarkable outreach activities in Addis Ababa and Mekelle. He has been engaged with the ESSS since 2012 and was named the ESSS Youth Space Ambassador in 2019 for his unwavering commitment to the awareness creation movements and outspoken advocacy work of the sector. He has completed a prestigious aviation technology training under the auspices of the Presidency of Turkey and organization of Yunus Emre Enstitüsü. In September 2020, he earned his dual honors degree through a joint program of Mekelle University and Thomas More University of Applied Sciences which covered a unique curriculum called Moonshot-Ethiopia starring in Innovation, Creativity, and Entrepreneurship. He has received Space In Africa's premier award, Top 10 Under 30 African Space Industry Award - Class of 2021. Tensae was one of the five recipients of the Global Grants Programme through SGAC in 2021, as well as Member of the Month for January 2022 and Pioneer Award - Spring 2022.





- Lama AlOraiman is a Co-Founder of Kuwait's first Space Exploration and Research company Ignition LLC, and a
- Lama stepped into the space field in 2018 by becoming Kuwait's National Point of Contact for the Space Generation
- Both positions opened the door to new opportunities and allowed her to become proactive within the space
- Her involvement in the field was through delegating and presenting at the world's biggest space conferences annually, giving TEDx talks, competing in global hackathons that solve real-life problems using space technology, and organizing
- Most importantly, was utilizing SGAC's seat at the United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS) to promote the voice of Kuwait's youth to the global space community, which helped the country become a





Suraj ARANHA

Suraj Aranha is currently a PhD candidate from RMIT University, Melbourne, Australia. Has 5 years of technical Engineering work experience.

Suraj Graduated in 2014 with a Bachelor of Engineering (Mechanical) from Mangalore, India before joining a ship building company as a Design Engineer. There he was part of the design team that built two Geo Technical Research Vessels (GTRV) capable of drilling and seabed sampling in depths of up to 3000m, a Multipurpose offshore vessel (MPSV) and several smaller vessels for the Indian Navy and Coast guard. After working for 3 years designing ships, Suraj joined the small but highly skilled team of Indo-Danish artist-duo "Pors and Rao" at their studio in Bangalore. Here Suraj was involved in building Hi-tech artworks that was designed to move and react in life like ways which involved complex mechatronic systems. To develop his interests in the state-of-the art modern intelligent engineering applications, Suraj completed his Masters in Robotics and Mechatronics from RMIT in 2021. Working on the Intermediate axis theorem as his master's research project, Suraj developed interest in Space technologies and explorations which led him to continuing his research as a PhD candidate.

As an engineer who loves to find creative solutions, space offers opportunities to solve some of the most complex, massive problems with a lot of unknowns. If all the countries have common goals and unite to develop technologies, we could accelerate space exploration at a rapid pace and dedicate the best human achievements to the global peace and global prosperity.

Fahimeh BARZAMINI

Fahimeh Barzamini has been an associate researcher at the Space System Design Institute (SSDI) in the Department of Aerospace Engineering at the K.N. Toosi University of Technology (KNTU) since 2014. She earned her MASc (2017) in Aerospace Engineering from the KNTU and her BASc (2013) in Robotics Engineering from the SUT. Mainly, her research was centered around studying Star Sensors' capability enhancement in complex and perceptually-degraded environments. Her research towards a new algorithm for the Nasir-1 Star Tracker increases the reliability and efficiency of the existing autonomous navigation systems using optical sensors. Fahimeh served as an executive administrator in the SSDI from 2017 to 2020 while conducting her activities as a senior system engineer in several Iranian leading-edge space programs, including the Pars-1 Iranian Satellite Design, Nasir-1 Celestial Navigation Sensor, Industrial Software Engineering, Competition Teams Consulting, etc.

As a Control Engineer (ICE) at the PGPIC companies since 2019, she has attained a broad sight in project engineering, stakeholder communication, interdisciplinary interactions, and complex systems requirements along with team working. Fahimeh started her contribution with the Institute of Electrical and Electronics Engineers (IEEE) in 2018, rolling as a scientific member and arbitrator. Her current research professionally focuses on Deep & Machine Learning. Path Planning & Trajectory Optimization, and Optimal Control of spacecraft swarms.

Fahimeh is immensely enthusiastic about the peaceful international cooperation in space and firmly regards the convergence of humanity's ambitions, and destinations will be poised in the missions of tomorrow among the Stars



Thomas CERNEV

Tom Cerney is a Space Systems Engineer at Shoal Group who manage and deliver systems engineering solutions for the most complex environments. Through his work on large space projects, Tom has contributed to the Australian Space Agency's goal to triple the size of the Australian space sector by 2030.

As a researcher at the Andy Thomas Centre for Space Resources at the University of Adelaide (UoA), Tom is part of the Lunar Construction Group, uniting the university's collective exploration, mining, manufacturing and engineering research strengths to address the challenges faced by long term planetary exploration, while ensuring the near-term application here on Earth. Here, Tom has co-authored a paper on lunar construction methods, and commenced research into space agriculture. Using the guiding principles from UN COPUOS, Tom believes that space is the ultimate field for international cooperation. Any long-term success in space exploration is dependent on humanity's ability to work together, foster innovation, and use expertise from around the world. For humanity to successfully return to the Moon, for good, and to Mars and beyond we must work together.

From Adelaide, Australia, with bachelor's degrees in Mechanical Engineering and Theoretical Physics UoA, and a Masters in Engineering for Sustainable Development at the University of Cambridge (CU). Tom continues his education as a Research Affiliate at the Centre for the Study of Existential Risk, CU, as the South Australian Chair of the Sustainable Engineering Society for Engineers Australia, and author for the UN Office for Disaster Risk Reduction..



Joshua CRITCHLEY-MARROWS

Joshua Critchley-Marrows is a former Senior Navigation Engineer at GMV NSL, where he served as project and technical lead of activities across the UK, Europe and Australia. Projects included delivery of smartphone high accuracy services, broadcast of satellite data in telecommunication networks and satellite mission feasibility studies for PNT applications on Earth and the Moon.

He is now completing his PhD with the University of Sydney on Optical Navigation as a form of alternative PNT to RF-based ranging, such as ground tracking and GNSS, for terrestrial and space-based applications. The scope involves visits and collaborations with universities in the UK, USA and Japan. His research is currently being develop into a business and commercialisation activity in Australia. He is also the Project Group Coordinator at the SGAC.

Joshua's inspiration for choosing space is on the basis of international cooperation. Space holds no borders, and there is no greater force for nations to work together than in space. The International Astronautical Congress serves as the leading platform for this mutual discussion and development together for the space industry. There is no parallel in other industries to drive such collaboration.

Maria Fernanda DEL BARCO LEON



María Fernanda's background is in mechatronics engineering, she is co-founder and currently works as Chief Systems Engineer at Orbital Space Technologies, a space start-up seeking to provide access to microgravity to Latin America and the world. The first project of Orbital Space Technologies is under development and seeks to study the fungus that causes the Panama Disease, which threatens banana plantations worldwide, in a microgravity environment to develop a cure. This project won first place in the ICECubes category in the 6th Mission Idea Contest and a recognition by the International Academy of Astronautics (IAA) as the project with the greatest potential for international cooperation. This is the second Costa Rican space mission and will have its first spaceflight in November of this year from Esrange, Sweden.

María Fernanda wants to make space more accessible by creating opportunities for people in developing countries and is passionate about advocating for women rights. Since 2018, she is an active member of TECSpace, the largest aerospace student group in Costa Rica which provides hands-on experience and learning opportunities for students in a country where aerospace engineering does not exist as a career. There, she worked in the development of different projects and created the Gender Equality Commission to execute solid actions against gender bias and increase the participation of women. She is also co-founder of the global network of Women in Aerospace Costa Rica, where she worked to increase participation, visibility and leadership of women in the emerging aerospace sector. More recently, María Fernanda was elected as SGAC's National Point of Contact for Costa Rica.

Martina DIMOSKA



Martina Dimoska is a Bachelor of Material Engineering and Nanotechnology at the Faculty of Technology and Metallurgy - UKIM. She's a Global UGRAD Alumni via Kent State University with a full scholarship. She successfully completed the Commercial Space Studies Graduate Program at Florida Tech with a Scholarship from Aldrin Family Foundation. Currently, Miss Martina Dimoska is pursuing a Master of Space Studies at the renowned International Space University. She is heavily focused on her Individual Research Project titled 'Setting up a lunar Dust 3D Solar Printer in collaboration with ECAM Strasbourg' amongst other projects.

Martina Dimoska is an experienced society shaper and influencer, leading initiatives. She has 8 years of evolution in the hackathon field: from a participant to a mentor, judge, and host. This year, she is the Local Lead of the NASA Space Apps Challenge Cleveland, annually held in such a historic location - the NASA Glenn Research Center, as well as the NASA Space Apps Challenge, Mountain View, Silicon Valley, California. She enjoys team dynamics and innovations the disruptive space start-up ecosystem brings. As a freelancer, she is Top Rated Plus on Upwork, working with companies from all over the world. Within her initiatives, she brings a lot of international cooperation on board, whether that is within teams or through the different perspectives of thinking her culture offers. She believes that the future of the space sector lies in equal levels of entry and a more balanced field, which could only be achieved through global unity...









Nisanur EKER

Nisanur is an aspiring aerospace engineer pursuing her master's degree in Aerospace. Born and raised in Turkey, she moved to Germany for her studies. She obtained her bachelor's degree in Mechanical Engineering from the Technical University of Munich. During her studies, she participated in extracurricular projects ranging from e-mobility to satellite systems. She led two subsystems within the student satellite project Munich Orbital Verification Experiment (move) of TUM. She was responsible for structure, assembly, integration & testing of the 6U CubeSat, where she accelerated the preliminary design phase. She was part of two stratospheric balloon flights testing the systems of the satellite and acquiring knowledge of the near-space conditions and its effects on the systems for all students involved. She was also the head of public relations, where she ensured the project is publicly visible through social media channels and organised team-building events.

In addition to her studies, she is working in the Munich-based New Space start-up DcubeD, where she works in both project management and engineering aspects of various space projects.

Nisanur is passionate about space and impact it can have on our lives. She believes there is something exciting about space for everyone and it can connect us all with the same excitement when we look up at the sky. Having worked in numerous multicultural teams, Nisanur thinks the way to success is to embrace diversity in the team and she wishes to lead such teams to success in her future career.



Adolfo JARA

As PhD student I was part of two satellite projects in Kyushu Institute of Technology, Japan. I, along with other members, built the first satellite for Paraguay; GuaraniSat-1 with satellites for Philippines and Japan as part of BIRDS-4 project. My main responsibility was to handle the satellite on-board computer. As project manager, I was coordinating the on-orbit operation of Paraguay, Philippines, and Japan satellites. I also was part of the construction of KITSUNE satellite, a 6U CubeSat which attempts to collect data from sensor terminals located in 12 different countries for the Store and Forward (S&F) mission.

Since 2018, I am part of the Paraguayan Space Agency as Aerospace Projects Execution manager where I am involved in the use of small satellites for the study of triatomines dispersion dynamics, the insect that transmits Chagas disease. This initiative attempts to help native people in isolated areas of Paraguay.

Paraguay is taking its first steps in space field and satellite research. I hope to make connections with experts and achieve cooperation in developing join projects for capacity building to strengthen the space sector in Paraguay. I consider this is a perfect opportunity to sensitize on the potential benefits and opportunities of space technology to improve the quality of life of people and development of my country.



Abdullah Hil KAFI

Abdulla Hil Kafi, a developer of the First Bangladeshi Satellite named BRAC Onnesha, is a young Bangladeshi researcher who has an enthusiasm for innovation and enjoys experimenting with new electronic equipment and technology. He has an extremely creative background with developed skills in Space hardware, Robotics, android-hardware interfacing & Embedded systems. He completed his M.Sc. in Applied Science for Integrating System Engineering from Kyushu Institute of Technology. During his M.Sc., he was the core member of the BIRDS-1 satellite Project, the champion of the AIRBUS GEDC Diversity award 2017. He also received the youth excellence award 2018 from ACI Limited Bangladesh, in the field of Science and Technology for his contribution to BRAC Onnesha. His major research is on the Single Event Phenomenon in commercial off-the-shelf components for space.

His research interest includes space Radiation, earth observation application using machine learning, and the satellite of things. Currently, he is working at BRAC University as a Research Associate. His major role is to establish a Center of Excellence dedicated to developing, verifying, and validating small Satellites. He is the co-founder of the Laboratory of Space System Engineering and Technology. He plays the role of the advisor of the IEEE Aerospace and Electronic System Society student branch, BRAC University. He is also working as Satellite Mission Idea Contest Co-Ordinator of UNICSEC-Global for the Bangladesh region



Malkia KELELUE

Malkia Kelelue is an Astrophysicist from Kenya. She is also a children's educator who is passionate about creating avenues for young people in Africa to have adequate access and exposure to opportunities in the Space sector. She has a BSc in Astronomy and Astrophysics from the University of Nairobi and is currently the first female Space Science and Astronomy officer at the Kenya Space Agency. She recently graduated from the Development in Africa with Radio Astronomy basic training programme supported by the Newton Fund in March 2022.

She spearheaded Kenya's application for the first round of the ISONscope opportunity opened in 2021 by the United Nations Office for Outer Space Affairs and the Keyldish Institute of Applied Mathematics where the Kenya Space Agency emerged as winners. The telescope offered will see the establishment of Kenya's first Optical Observatory in late 2022.

Malkia also pioneered the Space Club Program in Kenya that aims to educate young students on Space related disciplines. She and her team have created content for students in Space Engineering, Earth Observation, IT & Robotics and Space Science and Astronomy. Space Club has hosted mentorship events and activities in Kenya reaching over a thousand students with Space education since 2020.

"The Space sector creates several opportunities for regional and global collaborations. Of particular importance, is the need to build the capacity of developing counties in Space related matters. Through peaceful cooperation and partnerships, a new frontier in Space can be achieved for all of humanity."

KangSan KIM (Antonio Stark)



Antonio Stark is an international business strategist and space policy consultant based on Seoul, South Korea. His expertise lies in multinational space agreements, cislunar economy, and unmanned exploration systems. Antonio is currently the Asia-Pacific Regional Coordinator at Space Generation Advisory Council, East and Southeast Asia Regional Coordinator at Moon Village Association, and Strategy & Operations Officer at the Space Court Foundation. Antonio is and avid adventurer who's trekked the Himalayas, explored the Arctic seas, and enjoys going scuba diving.

Catherine MANDIGMA

The much-celebrated 2020 Preciosa Irma Florentin awardee of the Nutritionist-Dietitian Association of the Philippines for her leadership and trailblazing creativity – Catherine Raisa Kimberly Pal-et Mandigma, is a board-certified nutritionist-dietitian specializing in health & nutrition systems and basic life support for human space flight. Inspired by an ILOA (International Lunar Observatory Association) award in 2018, she founded the Space4Women-Philippines to motivate women and youth across the country to pursue space studies and their unique, divine calling.

Choco Boru[™] was conceptualized as a snack supplement in 2017 that may help avert calcium demineralization in case studies of astronauts' bone metabolism. Interested in cancer prevention onboard the ISS, she also ventured into antioxidant capacities research in her MSN pursuit at the University of the Philippines.

Her highly interdisciplinary-scientific background and diverse experience led a multination team to the championship in the 2018 Y-ISEF. This opened her to lead a team in the 2019 SG [ASEAN] in Thailand on joint research on capacitybuilding of the ASEAN Space Sector. She represented the Philippines on several platforms - in Athens (SG [Greece] 2017), Melbourne, Australia (FASTCO, 2017), and Bremen, Germany (IAC 2018). She was described by a 2018 issue of JAXA magazine as a firm visionary in human space flight. She is also a member of the committee on Space Medicine-Life Sciences Ph. Her interests revolve around scuba diving, skating, violin playing, and content creation at Pinay Meets World YouTube channel.



SOCIAL EVENTS

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Juan Carlos MARISCAL GOMEZ

Carlos has a background in Computer Engineering focused on Artificial Intelligence and robotics. For four years, he combined his work in the automotive industry with his passion for space. During this time, he contested in three NASA's robotics competitions with a student team from his alma mater, the National Autonomous University of Mexico (UNAM), obtaining various recognitions, starting his career in space afterwards. He was recognized with the Hans von Muldau Team Award by the IAF in 2016. He is ISU alumnus and has hold different roles in four analogue simulations. He also served as National Point of Contact in Mexico for the Space Generation Advisory Council from 2017 to 2020.

Carlos has a strong commitment with the outreach of space activities in Mexico to raise awareness of the importance of space among the society and the private industry. Besides SGAC, since 2016 he has collaborated with other institutions by organizing events and workshops in Latin-America.

He is co-founder and CEO of Dereum Labs, a Mexico-based startup that aims to provide any industry with the knowledge and tools necessary to become a space industry. Dereum Labs is currently working on Jaguar-1, the company's first lunar mission which will land two small rovers on the moon. Dereum Labs has achieved a great impact among the Latin-American region and has recently subscribed a collaboration agreement with Airbus Defence and Space and the Mexican Space Agency to develop technology to sustain human activities in space.

Joice MATHEW

Joice Mathew is an experimental researcher primarily interested in developing instruments for astronomy and Earth observations. Currently, he is working as an instrumentation scientist at the Advanced Instrumentation and Technology Centre of the Australian National University (ANU) in Canberra.

His research career took off at the Indian Institute of Astrophysics (IIA), India where he worked on Ultraviolet space instrumentation for his PhD thesis. After obtaining his PhD, he moved to the Max-Planck Institute for Solar System Research (MPS), in Göttingen, Germany, to work on the Solar Orbiter mission (a joint ESA and NASA project).

In 2019, Joice moved to ANU where he is involved in astronomical and Earth observation payload development as well as space qualification campaigns. This includes Emu- a near-infrared sky survey mission to be hosted on the International Space Station; GLUV- an Ultraviolet transient survey mission; Pyxis- a space interferometry technology demonstrator mission, and OzFuel- a multispectral imager for Australian wildfire monitoring. In addition, he provides system engineering inputs for the GMTIFS instrument- a first-generation adaptive optics integral-field spectrograph on the upcoming Giant Magellan Telescope.

He was a recipient of the 2018 Early Career development award by the Lunar Planetary Institute, USRA, Texas.

He believes humanity has greatly benefitted from international collaboration in various space missions and would benefit even more if underrepresented nations and groups could also be promoted and engaged in various international space activities. Further collaboration would accelerate future space endeavours to advance life here on Earth as well as exploration of the Universe.



Mahhad NAYYER

Mahhad Nayyer is an astrodynamicist by profession and space sustainability advocate. Mahhad's areas of expertise are orbital mechanics, space mission analysis and design, spacecraft design, human spaceflight, and systems engineering.

After high school, Mahhad was awarded the Department of State International Cadet Exchange Programme scholarship, letting him study and train at the U.S. Air Force Academy in Colorado Springs. His academic area of concentration was orbital mechanics and spacecraft design within the major field of Astronautical Engineering. One of the most memorable experiences of his undergraduate journey was the field trip to NASA JSC as part of the Human Spaceflight class taught by astronauts Gary Payton and Jim Dutton.

In 2020, Mahhad enrolled in a postgraduate master's programme in Space Systems Engineering and Business Engineering offered by Graz University of Technology, Austria. As the astrodynamics lead, Mahhad led his cohort's SMAD design for a sub-geo CubeSat capable of providing space traffic and inspection services for geostationary orbit. His graduate research focussed on pre-processing, data acquisition, post-processing, orbit determination, cataloguing, and correlation of geostationary objects.

Mahhad hypothesizes that the problem of space junk is yet to be defined properly. He hypothesizes that a global STM solution must be based on observations from on-ground and in-space active and passive sensors contributing toward a decentralized but standardized cataloguing system. He believes that the secret of space sustainability lies in the inclusivity of all stakeholders: especially the governments of ALL countries. He intends to further explore this problem during his doctoral studies.



Bildad Cheae NJENGA

graduating from university in the year 2018.

He got the privilege to be part of the space sector in October 2020 when he joined KSA. He got to be part of a pilot project by KSA titled Monitoring for Information and Decisions using Space Technologies (Project MIDST). The project seeks to generate remote sensing products from freely available satellite imagery using open source software platforms and primarily uses the Google Earth Engine (GEE) platform. He worked hand in hand with team members from GIS and other departments to develop scripts that generate high level products from preprocessed satellite imagery, as well as developing user friendly applications that showcase the high level products.

Since then, he has also been involved in setting up an Open Data Cube (ODC) instance that will be hosted and served to the general public in Kenya at a national scale. His role has been to set up the required hardware and software infrastructure required to host the instance. He also works hand in hand with fellow team members to achieve seamless integration of the different components of the instance and also to ensure successful analysis of remote sensing data into high level analysis products through python scripts.

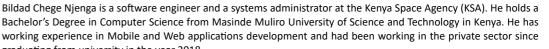
In addition to the GEE and the ODC, he has worked with other Remote Sensing Data analysis and management tools such as Geoserver, Digital Earth Africa and Quantum GIS. Prior to his time at KSA, Chege worked as a mobile applications and web services developer for a private company and also interned as an ICT person in several other organizations.

Alongside his colleagues at KSA and other counterparts, he believes that having a readily available and locally managed Earth Observation data analysis platform such as the ODC instance would be a huge step towards Kenya achieving Space Capability goals as a developing nation. He believes that sharing about the work on setting up the data cube instance will be a positive contribution in the IAC event and he will be able to share and also gain insights.

Ramson NYAMUKONDIWA



Ramson is a Senior Space Research Scientist at the Zimbabwe National Geospatial and Space Agency (ZINGSA) and a former lecturer at the University of Zimbabwe. He holds a Master's degree in Electronics and Information Engineering from Chonbuk National University in South Korea. He obtained his Bachelor's degree in Electronics Engineering from the University of Tlemcen in Algeria. Ramson is currently pursuing his Ph.D. studies in Electrical and Space Systems Engineering at Kyushu Institute of Technology (Kyutech) in Japan, where he is involved in multiple satellite projects. He is part of the Laboratory of Lean Satellite Enterprises and In-Orbit Experiments (LaSEINE) under the supervision of Professor Mengu Cho. Ramson was part of the BIRDS-5 project which built the first satellite of Zimbabwe, ZIMSAT-1. He gained vast experience in satellite development processes, from mission definition to satellite operation. He can operate various space environment testing equipment and satellite ground control stations. He worked on several satellite bus and mission systems, including the communication subsystem, store and forward mission, automatic packet reporting system-digipeater mission, satellite ground station, and electrical power system. He is also a member of the LEOPARD satellite project at Kyutech, responsible for the satellite communication subsystem. His goal as a space systems engineer and researcher is to bring tangible and practical solutions that improve human lives through space technologies. Ramson is interested in mentoring and training young people aspiring to be future space scientists, engineers, and leaders, which can be achieved through networking and international collaboration.









Didunoluwa OBILANADE

Didun is from Wales, UK, having been born in Nigeria. He is a Doctoral student at Luleå University of Technology researching Design and Qualification of Additive Manufacturing (AM) for Space Applications.

He holds an MSc in Astronautics and Space Engineering from Cranfield University, having read General Engineering at Grey College, Durham University. Didun was a recipient of the Royal Academy of Engineering and RAeS MSc Award and obtained a Joint UKSA-ESA scholarship to attend the International Space University's Space Studies Program; hosted by NASA Glenn Research Centre in Ohio, USA. Didun recently won the best poster prize for "Surface Roughness Considerations in Design for Additive Manufacturing" at the Swedish Arena for AM of Metals Academic Conference 2022.

He has previously attended IAC and SGC as a UK delegate, most recently in 2019 where he worked as the moderator for the NASA Space Exploration Working Group. Additionally, he received the "Young ESA - SGAC Diversity Scholarship 2017" for his essay and spoken word poem "Space 4.0 a United Europe."

Prior to his PhD, Didun was the Programme Manager for the Board of the UK Government's Aerospace Growth Partnership. He also worked at the GKN Aerospace AM Centre in Bristol, UK on Design for AM in the ESA Prometheus engine project.

Through his passion for the space industry Didun has worked all over the world, and through this global experience he believes that international cooperation within the industry can bring long-lasting solutions to the global issues of sustainability, climate change and inequality.



Peter OKELLO

Peter Okello is a graduate from the University of Nairobi in Kenya with a bachelor of science degree in Geospatial Engineering. He is a GIS expert currently working at the Kenya Space Agency as a Remote Sensing officer. He works with the Agency to help promote the use of Geospatial technologies in satellite data analysis and GIS mapping.

Okello is the lead GIS scriptwriting and mapping under the Agency's Earth Observation program on Monitoring for Information and Decisions Using Space Technology (MIDST) project. The project aims to utilize GIS resources to co-develop Earth Observation products with stakeholders drawn from various sectors aligned with the following application areas; Natural Resource Management, Urbanization and Disaster management.

He has special interests in the development & utilization of Earth Observation data and tools to support decision making. His specializations include; GIS scripting and analysis, online GIS mapping and mobile GIS mapping.

Okello is also one of the pioneers of the Agency's Space Club Program that aim to educate young students on Space related disciplines. He participated and contributed immensely to the creation of the Space club contents especially in the Earth Observation book on Remote sensing & GIS.

The space industry holds a number of opportunities and potentials that can only be exploited if the players within the space sector cooperate and combine effort towards achieving the best out of the platform that space provide.



Sara SABRY

Sara Sabry is the first female Egyptian Analog Astronaut, and is the founder and executive director of Deep Space Initiative, a non-profit company that aims to increase accessibility and opportunity in the space field.

Sabry is a Mechanical (B.Sc.) and Biomedical (M.Sc.) Engineer, with experiences that span from Mechatronics and Robotic Surgery, to Stem Cell Development and Bioastronautics. After her studies, Sara worked at a Tech Startup in Berlin as the deputy CTO working on Augmented Reality mobile applications. This Fall, she will begin her Ph.D. in Aerospace Sciences at The University of North Dakota, where her research will focus on engineering the next generation of planetary spacesuits. Along with her studies, she plans to begin her private pilot license, as well as continuing her astronaut training.

Sara is helping the Egyptian Space Agency with a number of exciting projects that will be announced this summer, including building the first analog research station in Africa. Sara was the team lead for the Transportation on the Moon group within the LCE of the Moon Village Association, an independent researcher with Biofrequency Analytics, and a teaching associate at Mars University.

Prior to her work in the Space industry, Sara was a Yoga instructor, Crossfit coach and spent some time practicing Mixed Martial Arts. In 2016 she traveled around Africa volunteering in different organizations, including a Women Empowerment Center in Uganda, and a primary school in South Africa. Sara is extremely passionate about our oceans, is an Advanced Open Water Certified diver, and spent 6 weeks in Madagascar as a marine conservationist.



Nathanan SACHDEV

Nathanan Sachdev is a young engineer with an extensive background in aerospace and aeronautical engineering, he is currently working on the THEOS-2 Small Satellite project on behalf of Geo-Informatics and Space Technology Development Agency (GISTDA) in collaboration with Surrey satellite technology (SSTL) as the lead Assembly, integration, and testing Electronics specialist engineer.

As a young space engineer, he is well aware of the scarcity of opportunities and believes that the development of Thailand's space infrastructure is critical to promoting the country's space economy and thus increasing opportunities for other passionate engineers. His efforts played a pivotal role in setting up Thailand's first Assembly, Integration, and Testing Facility. The success of the facility's development has promoted more entrepreneurs and startups to take the next step in developing their spacecraft and in turn, strengthening the aerospace economy and demand in Thailand. To further create sustainable momentum in space economy development, space engineering know-how must be transferred to as many individuals as possible. As a result of this intention, the THEOS-2 smallSAT team at GISTDA has hosted multiple training programs for passionate individuals across the country.

He is certain that the eventsat IAC will provide everyone with the opportunity to gain insights and adaptable solutions from one another and alsoallow for contributions through shared learning experiences to help spark groundbreaking solutions to problems encountered at all levels of the space industry

Niki SAJJAD



Niki Sajjad is a Ph.D. candidate in Space Engineering at the Space Research Laboratory (SRL), K. N. Toosi University of Technology. Her research focuses on space sustainability by developing a Hardware-In-the-Loop (HIL) simulation system for in-orbit space debris tracking and pose estimation. She obtained a Master's degree in Space Engineering from her current university and a BSc in Electrical Engineering from Isfahan University of Technology.

Niki has worked as an attitude control designer and HIL engineer in the APSCO Student Small Satellite (SSS) project (2017-2021) and Nasir-1 CubeSat (2019-2021) and has been the SRLsat team lead (since 2021). Currently, SSS is orbiting around the Earth due to an international collaboration among Asia-Pacific universities. Niki serves as the National Point of Contact for Iran at the Space Generation Advisory Council (SGAC) and has actively participated in the Space Safety and Sustainability and also the Small Satellite project groups since 2020.

She dreams of paving the way for future generations, especially in non-space-faring areas, by giving them access to space educational materials. To achieve this, Niki has been part of a team at SRL to develop a hands-on training package, a platform that enables students with different backgrounds to assemble and test their modular and programmable 1U CubeSat using Commercial-of-the-Shelf (COTS) components. Since 2018, She has been a mentor in international and national hands-on workshops to move toward reducing the gap between students and the space industry in emerging space nations. Niki has a genuine interest in a wide variety of topics from engineering to art and discovers relationships between them to better show the importance of taking action for sustainable and peaceful space and Earth.



Elizaveta SHASHKOVA

Elizaveta Shashkova is a space engineer interested in Space Exploration and Human Factors. Born in Moscow, in 1999, she moved to Lyon, France, when she was 6. Very fond of traveling, she is a passionate organiser; and which trips could be more exiting to plan than to the Moon, to Mars and further?

After a bachelor's degree in Physics at the University of Strasbourg, she joined the Master of Science in Aerospace Engineering at ISAE-Supaero, in Toulouse. Specializing in space systems, she got a very wide and deep outlook on the sector and was able to apply this knowledge to a variety of projects. She got a first grip on the organisation of space missions by joining CoRoDro as a member of the project management team. In the context of IGLUNA 2021, she was helping supervising the development of a Collaborative and autonomous Rover-Drone system for Moon exploration.

For her master's research project, she was welcomed to Spaceship FR, a CNES project aiming at developing the technological bricks necessary to have a sustainable base on the Moon and Mars. There, she worked on the mission and electrical system of a Moon habitat. For her end-of-the-studies internship, she stayed in the team to develop an AI assistant for astronauts in a space station, able to monitor the base as well as support the astronauts in their activities.

She is also very passionate about illustration, cinema, and animation as well as board games (she is indeed Terraforming Mars on a regular basis).





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Janardhan SILWAL

Janardhan Silwal has been working as a satellite research fellow at Antarikchya Pratisthan Nepal [Nepal Space Foundation] since its establishment in 2021. He is also mentoring high-school students about CubeSat and guiding them in building one, at Space System Laboratory-Kathmandu University High School (SSL-KUHS). He graduated with a Bachelor's Degree in Electrical and Electronics Engineering from Kathmandu University in 2021.

He first started his space-related activity with participation in CanSat training in 2017 at IOE Pulchowk campus, which was his first hands-on learning of satellites. Subsequently, he has been involved in different CanSat programs during his time in University. His field of interest lies in On-Board Computers (OBC) and embedded systems.

In Antarikchya Pratisthan Nepal, he is working as a project manager in different satellite, non-flight, and flight projects, SastoCube, Danfe Space MSN, and Project MUNAL. Along with project management, he is responsible for designing and developing the mission control system for Danfe Space MSN and OBC for Project MUNAL. Project MUNAL is being implemented at SSL-KUHS with the active participation of high-school school students from and around KUHS. He believes that educating young school students with project-based learning, especially in fields such as satellites, is one of the important factors in promoting space awareness and developing the space sector in his home country Nepal.



Alina VIZIREANU

Alina Vizireanu is an entrepreneur in space education and geospatial and Earth Observation technologies, driving her focus toward Human Development in the Space sector. She is a graduate of the University of Bucharest, Romania, Faculty of Geography, geospatial specialisation. She has further developed her academic education as part of international programs offered by ESA, the University of Luxembourg, IE Business and Draper University. In 2020, interested in young people's development, she founded AVINTERRA Consulting, where the team delivers train-the-trainer GEO (Geospatial and Earth Observation) courses, webinars and space talks that have the power to enhance career prospects for space and geospatial sectors.

Alina collaborates with organisations that aim to make a difference in NextGen's development, creating programs for international NGOs. Member of the IAF Space Education and Outreach Committee, mentor and advisor for young people and startups such as ROSPIN and BlinkSpace, Alina enjoys creating new initiatives as a Space Education Programs developer. Her main partners are the Romanian Science Festival, 4wardFutures UK and Space Science and Engineering Foundation in partnership with Imperial College London, UK.

Together with a empowered and enthusiastic team, she is eager to democratise access to space education for younger generations of NextGen space engineers and enthusiasts alike. For this, she is the co-founder of AIM Space, a Romanian startup currently part of the EU H2020 Space Hubs Network, ESA Spark Graz pre-accelerator programme.



Roxy WILLIAMS

Roxy Williams studies Software Engineering in ULACIT - Latin American University of Science and Technology in Costa Rica. She is currently the National Point of Contact (NPoC) for Nicaragua. Roxy received the SGAC Pioneer Award 2021 and also the NPoC of the year for the North, Central America and the Caribbean region in SGAC for her contributions in SGAC and the space sector. She was also selected as a student Scholar for the Grace Hopper Celebration, the largest gathering of women in computing. Currently she is working as a lead of the Command & Data Handling and Comms subsystems on a Mercury Sample Return Mission Design for the SGAC Space Exploration Project Group RAISE team. Roxy is the president of the Society of Women in Space Exploration Costa Rica. She is a young female passionate about space, who is driven by diversity and inclusion and who strongly promotes space education in her homeland Nicaragua.

Roxy worked on a CubeSat design with the Brazilian National Institution of Space Research - INPE, she worked on the design of a Lunar Hospital using Lava tubes during her virtual Analog Astronaut training. She recently co-designed, supervised and produced a web app solution to determine the safest and most suitable sites for shelters for the Caribbean coast in Nicaragua. The team used Sentinel-1, elevation and land cover derived from FAO's SEPAL cloud platform and Google Earth Engine to derive low, medium and high shelter suitability.



Ruida XIE

Ruida Xie is a PhD candidate at the Australian Centre for Space Engineering Research (ACSER) in the School of Electrical Engineering and Telecommunications at the University of New South Wales (UNSW). His current research interests include off-Earth mining & Space Resource Utilisation (SRU), mission design and trajectory optimisation. Particularly, he is interested in the application of artificial intelligence and big data in space sector. He is an active researcher in these areas and has published his work on multiple journals and conferences. He is looking forward to sharing his insights on space mining and resources utilisation with the space people from all around the world at IAC.

He holds a B.E in Electrical Engineering and M.E in Control Science and Engineering from Harbin Engineering University, China. His past research experience includes the design of attitude control system and task planning for remote sensing satellites, etc. He participated in multiple projects from China Academy of Space Technology during his masters. In 2017, he was awarded the China National Scholarship from Ministry of Education in recognition of his academic achievements. In 2018, he was granted the University International Postgraduate Award from UNSW to pursue his PhD. In 2019, he won the top-up scholarship from Commonwealth Scientific and Industrial Research Organisation (CSIRO). In early 2021, his PhD project was granted for High-Performance Computing (HPC) resources from Australian National Computational Infrastructure (NCI Australia).





STUDENTS & YOUNG PROFESSIONALS EVENTS

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1.3.3 Future Space Leaders (FSL) Grant Programme

The Future Space Leaders Foundation (FSLF) is pleased to announce the 2021 Future Space Leaders Grant Program. Intended for U.S. graduate students and young professionals who are pursuing space- and satellite-related careers, the program will provide grants for participation in the 71st International Astronautical Congress (IAC) to be held in Dubai, United Arab Emirates, USA, October 25 – October 29, 2021. In addition to attending the IAC, Grant Recipients will also be involved in supplementary career development activities in Dubai. These IAC-associated events include the Cross-Cultural Presentation Workshop, the United Nations/International Astronautical Federation (IAF) Workshop, the Space Generation Congress hosted by the Space Generation Advisory Council (SGAC) and the Young Professionals Workshop. These additional activities will necessitate Grantees' presence in Dubai, United Arab Emirates, beginning on October 20, 2021.





Chris NIE is the Senior Business Development Manager for Advanced Programs at Sierra Space, a commercial space company building platforms in space to benefit life on Earth. Chris identifies new business opportunities across government and commercial markets in this role. Prior to Sierra Space, Chris worked at Lockheed Martin in business development for deep space exploration missions and as an engineer on multiple programs including Orion, LunIR, and GPS III. He worked at BioServe Space Technologies during his Master's Degree and spent time as a co-op at NASA Johnson Space Center, the Jet Propulsion Laboratory, and the Air Force Research Laboratory. He is active in the Space Generation Advisory Council where he previously managed the Space Generation Congress, the American Institute of Aeronautics and Astronautics serving leadership positions in multiple committees, the International Astronautical Federation, and is an alumnus of the Students for the Exploration and Development of Space. He is honored to have been named a Future Space Leaders Foundation Fellow, a Space Generation Leadership Award recipient, and an Aviation Week Twenty20s awardee as a rising leader in Aerospace and Defense. Chris graduated from the University of Colorado Boulder with a Bachelor's and Master's Degree in Aerospace Engineering Sciences focused in Bioastronautics.



Cadence PAYNE (she/her) is a PhD candidate in the department of Aeronautics and Astronautics at MIT. She's a member of the Space Telecommunications, Astronomy and Radiation lab where she specializes in CubeSat mission and payload design for Earth observing missions. Since coming to MIT, she's been involved with 8 CubeSat missions, some of which she served as lead Systems Engineer and/or Project Manager. Her dissertation work involves the design of CubeSat-based hyperspectral imaging payloads that monitor fluctuations in ocean behavior to inform climate change mitigation strategies and climate models. Outside of academic endeavors, she's also heavily involved with Diversity Equity and Inclusion (DEI), mentoring, and outreach initiatives at both departmental and institutional levels, as well as with Career Girls and #BlackInAstro. She extends these efforts as a member of the GEM, Matthew Isakowitz, and Patti Grace Smith Fellowship programs. Prior to coming to MIT, Cadence earned a B.S. in Space Science from Morehead State University in Kentucky, her home state. She also holds a S.M. in Aerospace Engineering from MIT's AeroAstro department.



Esther PUTMAN is a Bioastronautics Ph.D. student studying virtual reality astronaut training at the University of Colorado Boulder. She received a B.S in Neuroscience and a B.S. in Biology from the University of Kentucky in 2019. In 2021, she received a M.S. in Aerospace Engineering and an M.E. in Engineering Management from the University of Colorado Boulder. She has followed her passion for the future of humans in space as a Parabolic Flight Coach for Zero Gravity Corporation, a Research Payload Systems Engineer with Space Tango, and a Space Life Sciences Training Program Researcher at NASA Ames. She received a 2020 National Science Foundation Graduate Research Fellowship and 2018 Women in Aerospace and Astronaut Scholarships. She was also selected as a 2018 Brooke Owens Fellow, where she worked with Earth Observation teams at Vulcan Inc. to address global issues in climate change and illegal elephant poaching. She advocates for research funding for the International Space Station by speaking to policy makers about how access to space improves life on Earth. Esther has a strong passion for STEM education and showing students how they can become involved in space exploration, leading hands-on STEM outreach activities with middle and high school students across the nation.



Jack REID (he/him) is a PhD student working in the Space Enabled Research Group at the MIT Media Lab. His research focuses on the use of Earth Observation (EO) technologies for sustainable development. His IAC paper details the framework that he and his collaborators use to ensure that such EO applications are participative and targeted towards the needs of all stakeholders, not just the wealthy and powerful. In addition to his research work, he is very involved in advancing policies that benefit graduate students, including facilitating the recent launch of the Graduate Research and Development (GRAD) Caucus in the US House of Representatives. Prior to his PhD program, he completed a dual masters in Aeronautics & Astronautics and Technology Policy from MIT. His undergraduate was at Texas A&M University, where he received a B.S. in Mechanical Engineering and a B.A. in Philosophy.

Manwei CHAN is an NSF Fellow and PhD Candidate in Aerospace Engineering at MIT, studying responsive, remote sensing satellite constellations. He wants to mature the commercial space ecosystem, eventually allowing more people and projects to utilize space. For his Master's degree, he wrote a guidance algorithm that would allow satellite servicing vehicles to dock with a tumbling object. He is also a 2019 Matthew Isakowitz Fellow, and while at NanoRacks, developed strategies for commercial space station applications. He is also the current international coordinator at Voyager Space, where he is working on developing international governmental and academic partners for Starlab and the rest of the Voyager ecosystem. Outside of academics he is involved with STEM outreach, organizing the MIT Space Seminar, MIT SpaceTech, and SGAC Fusion Forum, events geared toward young professionals and designed to inspire future generations of space enthusiasts. In his free time, he likes to ski, hike, and play football (soccer).



Vera DEMCHENKO currently works as a Systems Test and Verification Engineer on the Lockheed Martin's Orion Program. In 2019, she completed her Astrophysics BA at University of Colorado Boulder. Vera is a Class of 2019 Brooke Owens Fellow, a young professional mentor for the Zed Factor Fellowship and Patti Grace Smith Fellowship, and an active member of the Space Generation Advisory Council (SGAC). She is passionate about commercial space programs and space sustainability. Previously, Vera has interned at NASA Goddard Space Flight Center as the Outreach Coordinator and has worked as a Public Presenter at the Fiske Planetarium. She encourages young people from all backgrounds to pursue their professional development goals and takes great pleasure in being a mentor for the next generation.



Skylar EISKOWITZ is an Aeronautics and Astronautics PhD student in the Engineering System Lab (ESL) at MIT. She was a 2018 Brooke Owens fellow and is a recipient of the National Science Foundation Fellowship, which helps support her research on autonomous satellite communication networks. Prior to her graduate studies, Skylar received her B.S. in Mechanical Engineering from The Cooper Union for the Advancement of Science and Art and has interned at Avascent, the Aerospace Corporation, and Raytheon BBN. Skylar is also involved in a research project where she builds machine learning models for financial options, and loves to share her passions for space systems, optimization, and finance through mentorship opportunities. In her free time, she enjoys pursuing hobbies of surfing, basketball, and volleyball.



Sorina LUPU is a 3rd year PhD student at Caltech, studying aerospace engineering. She has two master degrees, one from Caltech in space engineering and another one from the Swiss Federal Institute of Technology, Lausanne in Robotics and Autonomous Systems. Sorina is also an affiliate of the Keck Institute of Space Studies (KISS), a 'think and do tank' that develops revolutionary new science approaches, technology, and mission concepts. Sorina's current research focuses on autonomy, control, and machine learning applied to robotics and spacecraft. Her research was published in prestigious journals such as Science Robotics. Before coming to Caltech, she led numerous teams during her master's and bachelor's studies. For example, she led the first Swiss team to participate in the Spaceport America Cup, the biggest rocket competition for students, and the first Romanian team to participate in the REXUS/BEXUS rocket project. In addition, she won numerous awards like the Amelia Earhart Fellowship, given by Zonta International and the Anita Borg Women Techmakers given by Google.







STUDENTS & YOUNG PROFESSIONALS EVENTS

ASSOCIATED EVENTS

SOCIAL





Aaron ZUCHERMAN is a Matthew Isakowitz Commercial Space Fellow and Systems Engineering Ph.D. Candidate at Cornell University. His experiences in the space industry range include roles as an engineer, researcher, business developer, project manager and policy analyst at 2 Federal Research labs (The Aerospace Corporation and Los Alamos National Labs) and 5 private businesses (AeroVironment, Ecliptic Enterprises, Altius Space Machines, Twiggs Space Lab and Kentucky Dataseam initiative). Aaron is an active member in several space research groups and projects including NASA's Small Satellite Reliability Initiative, the Space Generation Advisory Council, INCOSE's Space Systems Working Group and the Small Payload Ride Share Association's Multi-Manifest Design Specification project. Through these organizations, he has supported research on a variety of topics such as responsive space enterprises, spacecraft regulatory compliance, leveraging commercial terrestrial capabilities in space, enabling modular and interoperable space platform solutions, and the insertion of new and game-changing technologies and innovations into heritage organizations. As a 2021 graduate of NASA's Planetary Science Summer School, and a mission manager for two academic Cubesat missions (NMTsat and Cislunar Explorers), Aaron's academic experience spans from the study and design of Earth-orbiting and Interplanetary CubeSats missions and proposals, to the application of systems engineering methodologies, agile technology development processes and risk and cost analysis techniques to space technology development efforts. As of May 2022, Aaron has authored 19 published papers and has given over a dozen technical presentations at various conferences including the CubeSat Developers Workshop, AIAA Small Satellite Conference, IEEE Aerospace Conference, and International Space Development Conference. He is also an active mentor in several educational and professional development programs through the SGAC, Big Brothers Big Sisters and Scouts BSA. Aaron attended Morehead State University's Space Systems Engineering MS program and graduated with honors from New Mexico Tech with an BS in Mechanical Engineering.

1.4 IAF/ISEB Educators Professional Development Workshop

Date:	Saturday 17 September 2022
Time:	08:30 - 17:00
Venue:	Room W06, Level 3, Hall 7, Paris Convention Centro

In collaboration with the International Astronautical Federation (IAF), CNES and the International Space Education Board (ISEB) are pleased to offer an Educator Professional Development Workshop (EPDW) on Saturday, September 17, 2022 ahead of the 73rd International Astronautical Congress (IAC). The purpose of the EPDW is to equip teachers with tools to introduce space science and technology to students in their classrooms. This workshop will be split into two segments, with the morning session focusing on the theme of Martian exploration, and the afternoon session focusing on the theme of climate and the environment. Each session will further be broken down into two hands-on workshops, and participants will be asked to select one of the two workshops that interests them the most.

This event is offered to high school and college teachers in the Paris region, however segments of the workshop will be presented through a webinar that will be accessible to educators across France. For those attending in person, this workshop will take place in the Paris Convention Centre, Pavilion 7, Room W06.

Further details on the workshop content are presented below:

Saturday 17 September 2022

Time:	Programme:
08:45 - 12:30	Martian Exploration
	 Workshop 1 - Ingenuity drone: This workshop and engineering. It proposes a study of Martia need to fly, and to note that a conventional t will be programmed to model the drone in a N similar to the one on Ingenuity in order to convent order to convent the statement of the statement
	 Workshop 2 – Programming and optimizing college professors in physics-chemistry, mather introduce students to Scratch software by more Participants will learn to analyze the terrain, each trajectory, move the rover, program a pro- desired destination.

13:30 - 17:15 Climate and Environment

- SWOT mission prior to the launch of the satellite will be discussed.
- public health, geopolitical, environmental and climate consequences can be discussed.

Sponsored by:









re

o is for high school teachers of physics, chemistry, mathematics, ian atmosphere to determine how much power a drone would terrestrial drone would be unable to fly on Mars. Simulations Martian environment, followed by an experiment on a battery ompare results.

ng the trajectory of a Martian robot: This workshop is for nematics, and technology. The objective of this workshop is to odeling the path of a rover in an environment with obstacles. , study different routes, calculate the energy consumption of path, and ultimately avoid obstacles in order to arrive at the

• Workshop 1 – ArgoHydro and the SWOT mission: This workshop is for high school and college teachers in earth sciences and history-geography and will explore the resources of the ArgoHydro project, dedicated to hydrology and the handling of the satellite data platform. Participants can study changes to the water cycle and the intensification of extreme phenomena (floods, droughts, etc.) due to the effects of the climate change using the pedagogical scenarios presented. In addition, the challenges faced by the

Workshop 2 – Sargasso in the Caribbean and deforestation of equatorial forests: This workshop is for high school and college teachers in earth sciences and history-geography. This workshop will teach participants how to use satellite imagery to locate Sargasso beds and identify their origin. Through these techniques, the state of deforestation of the Amazon rainforest can also be analyzed, and the resulting





1.5 Cross-Cultural Communications and Presentation Workshop

Date:	Saturday 17 September
Time:	08:15 - 13:30
Venue:	Room W03, Level 3, Hall 7, Paris Convention Centre

The Cross-Cultural Communications and Presentation Workshop is organized for Emerging Space Leader grant recipients and Next Generation Plenary speakers to provide them with the opportunity to improve their oral skills for their presentations and to sensitize them to the issues of speaking at large multi-cultural events.

Session presenters:



Scott MADRY

Scott Madry is a research associate professor at the University of North Carolina at Chapel Hill and a member of the faculty of the International Space University in Strasbourg, France. He has been doing international teaching and research for some 30 years and is interested in effective international communications and presentation skills.



Carol CARNETT

Carol Carnett is an attorney and a teacher of English to Speakers of Other Languages. She is Director of English Programs for the International Space University Summer Space Studies Program and Southern Hemisphere Space Studies Program, where she teaches English language skills, including writing and presentation workshops focused on effective English communication in international meetings and conferences.

Associated Events 2

2.1 IAF IDEA "3G" DIVERSITY PROGRAMME



With the aim of promoting and advancing the principles of "3-G" (Geography, Generation, and Gender) Diversity amongst a global space community the IAF has established an International Platform for Diversity and Equality in Astronautics (IDEA). The IAF welcomes delegates to participate in the IAC Diversity Activities and benefit from an intensive and open exchange on diversity and equality aspects within the IAF, amongst IAF member organizations as well as other organizations promoting diversity.

2.1.1 IAF IDEA "3G" Diversity Breakfast

Date:	Tuesday 20 September 2022
Time:	08:00 - 08:45
Venue:	Teminal 7, Paris Convention Centre

As an important element of the IAF "3G" Diversity Day the IAF welcomes all delegates to the IAF IDEA "3G" Diversity Breakfast sponsored by Jet Propulsion Laboratory (JPL).

To honour the motto of the IAC 2022 "Space for @II" we are pleased to dedicate the Day to the inclusion of people with disabilities in the space workforce and the opportunities that their contribute can give to the advancement of the whole sector.

The event will be opened with a welcome by the IAF President, Pascale Ehrenfreund, followed by an introduction from Moderator Deganit Paikowsky, IAF VP for Diversity Initiatives and Science & Academic Relations.

Laurie Leshin, Director of JPL, will then present on behalf of JPL on the topic "Inclusion Drives Innovation" and will present an exciting video to the audience.

To further deepen the topic discussed questions from the public are welcomed.

Sponsored by:

Jet Propulsion Laboratory



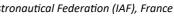
Programme:

08:00 - 08:05 Welcome

Pascale Ehrenfreund, President, International Astronautical Federation (IAF), France











International Astronautical Federation (IAF), Israel

Presentation by Sponsor



08:25 - 08:45 Networking

08:05 - 08:15

2.1.2 IAF IDEA Excellence in "3G" Diversity Award Luncheon

Larry James, Deputy Director, Jet Propulsion Laboratory (JPL), United States

Deganit Paikowsky, IAF VP for Diversity Initiatives and Science & Academic Relations,

(Upon invitation only)

Tuesday 20 September 2022 Date: 12:30 - 13:30 Time:

Teminal 7, Paris Convention Centre Venue:

The IAF Excellence in "3G" Diversity Awards recognize IAF member organizations (industry, government, academia) worldwide for outstanding contributions to the fostering of "3G" (Geography, Generation, Gender) Diversity within the space sector.

The highest standards in "3G" Diversity can be achieved both by organizations and within teams' activities. To correctly represent this the IAF Honours and Awards Committee (HAC) decided to divide the IAF Excellence in "3G" Diversity Awards in two corresponding categories.

This Luncheon is dedicated to the award ceremony for the 2022 IAF Excellence in "3G" Diversity Awards, bestowed to the National Space Science Agency (NSSA) of Bahrain and the UK Space Agency Education and Skills Team.

National Space Science Agency (NSSA)



"NSSA is nominated for their outstanding contribution and commitment to the 3G diversity in their workforce, leadership, promotion of their programs and for their exceptional drive and achievements in this short period of time due to their determination and diversity in the space community."

UK Space Agency Education and Skills Team



"The UK Space Agency Education and Skills Team uses space to inspire an interest among young people in STEM, encouraging them to aspire to rewarding careers in the space sector and ensuring they have the skills and experience needed to become valuable members of the space workforce. During 2021, the combination of programmes they run engaged over a million young people with space activities for at least half an hour each and has supported 68 students with 2-month work placements or space studies at the International Space University"

Sponsored by:



Programme	
12:30 - 12:32	Welcome Pascale Ehrenfreund, President, International Ast
12:32 - 12:37	Presentation by Sponsor Anne Carron, Chief Human Resources Officer, EUT
12:37 - 12:47	The ESA Parastronaut Feasibility Project David Parker, <i>Director of Human and Robotic B</i> <i>France</i>
12:47 - 13:05	IAF Excellence in "3G" Diversity Award Ceremon Anthony Tsougranis, IAF VP for Honours and Aw (IAF), United States
	Award Ceremony and Photo
	National Space Science Agency (NSSA) represent Mohamed Al-Aseeri, Chief Executive Officer, National States (National States)
	UK Space Agency Education and Skills Team repre-



tronautical Federation (IAF), France

TELSAT, France

Exploration, European Space Agency (ESA),

۱y vards, International Astronautical Federation

ted by: ional Space Science Agency (NSSA), Barhain

resented by: Ingmar Tirosh Kamalagharan, UK Space Agency Education and Skills Team, United Kingdom

















VESOCIATED EVENTS









2.2 12th IAF International Meeting for Ministers and Members of Parliaments (Closed Meeting)

Date: Saturday 17 September 2022 Venue: Paris Convention Centre

Saturday 17 September 2022

Space for All: Overcoming challenges to engage public and decision/policy makers



Saturday .	17 September 2022
	The Meeting will take place in Room NO2 (Third floor) of the Paris Convention Centre
08:30	Welcome Coffee
09:00	Welcome
	Pascale Ehrenfreund, President, International Astronautical Federation (IAF)
	• Sophie Primas, President of the Economic Affairs Commission of the French Senate, IAC 2022 Host Country
	 Dominique Tilmans, IAF VP for Parliamentarian and Ministerial Relations and User Communities and Master of Ceremony of the 12th IAF MMoP Meeting
	• <i>Philippe Baptiste,</i> President of the Centre National d'Études Spatiales (CNES), Space Agency of the IAC 2022 Host Country
	• Tahir Mirkishili, Chairman of Committee for Economic Policy, Industries and EnterprisingParliament of Azerbaijan, IAC 2023 Host Country
09:45	Session 1: Space for Public Services Sustainability – Rural Environments vs. Cities
	Presentation and Moderation by Fredric Nordlund, Head of the European and External Relations Department, Directorate of European, Legal and International Matters, European Space Agency (ESA).
	Intervention by Ministers and Members of Parliaments
	Roundtable Discussion
10:45	Session 2: Space for Disaster and Security Management
	Presentation and Moderation by Giorgio Saccoccia, President, Italian Space Agency (ASI) - TBC

	Presentation and Moderation by Giorgio Saccoccia , President, Italian Space Agency (ASI) - TBC Intervention by Ministers and Members of Parliaments <u>Roundtable Discussion</u>
11:45	Session 3: How to Engage Public, Policy/Decision Makers, and Media in Space
	Presentation and Moderation by Philippe Baptiste, President of the Centre National d'Études Spatiales (CNES)
	Intervention by Ministers and Members of Parliaments
	Roundtable Discussion
12:45	Closing Remarks

• Sophie Primas, President of the Economic Affairs Commission of the French Senate, IAC 2022 Host Country

• Dominique Tilmans, IAF VP for Parliamentarian and Ministerial Relations and User Communities and Master of Ceremonies of the 12th IAF MOP Event

13:00	Adjourn and Group Picture
13:05	Lunch Break

14:00	12 th IAF MMoP Event Press Conference (upon request by MMoP Par	
19:00	IAF International Meeting for Ministers and Members of Parliame (Brasserie La Coupole - 102 bd du Montparnasse – 75014 Paris)	
Sunday 18 S	eptember 2022	
08:30 - 09:15	VIP Gathering – Room TBD (IAC 2022 venue)	
09:30 - 11:00	IAC 2022 Opening Ceremony Paris Hall, Third Floor (Paris Convention Centre) – Reserved VIP Seats	
11:15 - 12:15	Opening of the IAC 2022 Exhibition and VIP Tour	
	Gathering at the entrance of the Exhibition HallOpening and Tour through the Exhibition	
12:30 - 13:30	ESA VIP Luncheon – Terminal 7 (Paris Convention Centre)	
13:45 - 15:15	Plenary Event 1: Heads of Space Agencies Paris Hall, Third Floor (Paris Convention Centre)	
15:15 - 18:00	Free time to visit the Exhibition and attending the IAF GNFs Session	
18:15 - 19:30	Plenary Event 2: Space4all: Space for all the Inhabitants of Planet E Paris Hall, Third Floor (Paris Convention Centre)	
19:30 - 22:30	IAC 20212 Welcome Reception Paris Convention Centre	
Monday 19	September 2022	
08:00 - 08:45	Industry Breakfast sponsored by Voyager Space/Nanoracks Terminal 7 (Paris Convention Centre)	
09:00 - 10:00	Plenary Event 3: The Value of Low Earth Orbit in the Next Decade	

Paris Hall, Third Floor (Paris Convention Centre)

Terminal 7 (Paris Convention Centre)

Private guided visit to the French Senate

Programme

Industry Luncheon

10:00 - 12:30

12:30 - 13:30

15:30 - 17:00





est by MMoP Participants)

pers of Parliaments Cocktail and Dinner 75014 Paris)

eserved VIP Seats for the MMoPs

IAF GNFs Sessions

itants of Planet Earth

Free time to visit the Exhibition and attending the IAF GNFs Sessions and other portions of the IAC 2022

Transfer will be provided from the convention centre and back

ASSOCIATED EVENTS

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Room W05, Level 3, Hall 7, Paris Convention Centre

Saturday 17 September 2022

10:30 - 13:00



2.3 IAC Hosts Summit – Ninth Session (Closed Meeting)

Date:

Time:

Venue:

Time:	Programme		
Opening	Welcome Address and Opening Remarks by Master of Ceremony		
10:30	Lionel SUCHET, IAF VP Technical Activities / Chief Operating Officer, Centre National d'Études Spatiales (CNES)		
Keynote with	IAC Evolution: What's New, What's Next?		
Q&A	Innovation is the foundation of the IAC sustainability and growth, and remains at the heart of our mission: deliver the best programme and provide the best experience for every delegate. How did we optimize the IAC programme for the IAC 2022 and what can we expect for future IACs in terms of cutting-edge projects and innovative ideas?		
	Christian FEICHTINGER, Executive Director, International Astronautical Federation (IAF)		
Masterclass for	Mastering the IAC Bid		
Bidders	The phenomenal success and popularity of the IAC has translated over the past years into an exponentially growing number of bidders for hosting the congress, thus making the selection process very challenging as competition is harsh. What are the Do's and Don'ts of the IAC Bid Process? This unique masterclass will provide essential guidance on the preparation of a successful IAC bid.		
Moderator:	Jan KOLAR, Director, Czech Space Office / Chair, Congress and Symposium Advisory Committee (CSAC)		
Panellists	Michael DAVIS, Chair, The Andy Thomas Space Foundation/ Member of CSAC		
	Christian FEICHTINGER, Executive Director, International Astronautical Federation (IAF)		
	Rosa Ma Del Refugio Ramírez De Arellano Y Haro, General Coordinator of International Affairs and Space Security Matters, Mexican Space Agency (AEM) / CSAC Member		
	Peter MARTINEZ, Executive Director, Secure World Foundation (SWF) / Member of CSAC		
	Maria Antonietta PERINO, Director, International Network Opportunities Development, Thales Alenia Space Italia / Member of CSAC		
	Coffee break		

	сопее вгеак
Pitches with Q&A	The Great Race to Host IAC 2025 The IAC 2025 bidders will deliver their presentations and will share a multi-angle perspective on what to expect
Moderator:	if they have the chance to win the great race to host the 76 th International Astronautical Congress. Lionel SUCHET, IAF VP Technical Activities / Chief Operating Officer, Centre National d'Études Spatiales (CNES)

Speakers:	Bangkok, Thailand: Pakorn APAPHANT, CEO, Geo-Informatics and Spac
	Beijing, China: Yiran WANG, Secretary General, Chinese Society of
	Istanbul, Turkey: Serdar Hüseyin YILDIRIM, President, Turkish Space
	Riyadh, Saudi Arabia: Mohammed AL-TAMIMI, CEO, Saudi Space Commis Sydney, Australia: James BROWN, CEO, Space Industry Association of
Presentation with Q&A	IAC 2022 - Space for @II The Host will demonstrate the remarkable conce ecosystem to Paris and producing the very first envi
Speaker:	Myriam COURNET, IAC Paris 2022 Project Manage
Presentation with Q&A	IAC 2023 - Global Challenges and Oppo Azerbaijan will bring together the global space co stood out from the competition thanks to its success country's tourism potential and organizational cape
Speaker:	Rena JAFAROVA, Director of IAC 2023 Department,
Closing	Closing Remarks by Master of Ceremony
13:00 - 14:00	IAC Hosts Summit Lunch







ace Technology Development Agency (GISTDA)

of Astronautics (CSA)

e Agency (TUA)

nission (SSC)

of Australia (SIAA)

epts behind IAC 2022: bringing together the whole space vironmentally sustainable IAC.

er, Centre National d'Études Spatiales (CNES)

ortunities: Give Space a Chance

community for the first time in its history. The city of Baku ssful promotional activities, a professional presentation of the abilities..

t, Azercosmos Space Agency of the Republic of Azerbaijan

ASSOCIATED EVENTS



2.4 IAC 2022 IAF Public Speaking and Presentation Skills Lab

Saturday 17 September 2022 Date: 15:00 - 16:30 Time: W03, Level 3, Hall 7, Paris Convention Centre Venue:

With Scott Madry and Carol Carnett

This two-hour workshop will focus on improving your presentation skills in an international scientific context such as the International Astronautical Congress. Presenters Carnett and Madry have given many workshops around the world and have advised graduate students for many years in developing their presentation skills. The workshop will begin with an introduction to the concept of culture and the role of culture in our participation in international activities.

Moderators:



Scott MADRY

Scott Madry is a research associate professor at the University of North Carolina at Chapel Hill and a member of the faculty of the International Space University in Strasbourg, France. He has been doing international teaching and research for some 30 years and is interested in effective international communications and presentation skills.



Carol CARNETT

Carol Carnett is an attorney and a teacher of English to Speakers of Other Languages. She is Director of English Programs for the International Space University Summer Space Studies Program and Southern Hemisphere Space Studies Program, where she teaches English language skills, including writing and presentation workshops focused on effective English communication in international meetings and conferences.

2.5 UN/IAF 29th Workshop on Space Technology for Socio-Economic Benefits: "Access to Space for All: Bridging the Space Divide"

Date:	16 - 17 September 2022		
Time:	08:00 - 18:00		
Venue:	Paris Convention Centre		

HOSTED BY THE CENTRE NATIONAL D'ÉTUDES SPATIALES



INTRODUCTION

The United Nations, through its Programme on Space Applications implemented by the United Nations Office for Outer Space Affairs, and the International Astronautical Federation (IAF) are co-organizing the Workshop on Space Technology for Socio-Economic Benefits on the theme "Access to Space for All: Bridging the Space Divide" to bring together policy- and decision-makers, and the research and academic communities to discuss on different topics related to space and how space science, technologies and applications can support of sustainable economic, social and environmental development and the development of science, technology and innovation (STI) policies related to space.

The Workshop will be held in Paris, France, from 16 to 17 September 2022 in conjunction with the 73rd International Astronautical Congress (IAC), and it will be the 29th in the series of such workshops.

WORKSHOP OBJECTIVES

The Workshop will provide a forum for discussion on how space science, technologies and applications can support of sustainable economic, social and environmental development and the development of science, technology and innovation (STI) policies related to space and leveraging the Access to Space for All Initiative.

Considering the direct and/or indirect relevance of space to all 17 Sustainable Development Goals (SDGs), the workshop will address the specific elements of SDG 4 (quality education), SDG 8 (decent work and economic growth), SDG 10 (reduced inequalities), SDG 9 (industry, innovation and infrastructure), in addition to SDG 17 (partnerships for the Goals). The Workshop will serve as a platform to ensure inclusive development in the areas of space technologies taking people, students, private sectors, researchers, academia, innovators and other actors on board in bringing the benefits of space exploration to the end-users..

The main objectives of the Workshop are to:

- 1. Bring together policy- and decision-makers, and the research and academic communities to help integrate space into policy and the decision-making process.
- Raise awareness about the activities of international and national entities, space agencies, industry and civil society activities related to innovation and socio-economic benefits of space activities;
- Raise awareness about capacity-building efforts on activities to enable access to space and discuss synergies and common 3. areas of work:
- 4. involving space emerging nations and industries;

Presentations made during the Workshop will be published on the website of the Office for Outer Space Affairs to increase awareness about the capabilities and benefits of space technology applications. The report of the Workshop and its recommendations will be distributed to the participants and the space technology user community.







Organized by:





Raise awareness of the efforts of the international space community on international cooperation efforts and partnerships

SSOCIATED EVENTS





ASSOCIATED EVENTS

Programme at Glance

Opening session:

Session 1: Heads of Governmental Space Actors on Innovation, International Cooperation and Socioeconomic **Benefits of Space**

Governmental Space Actors bear the most responsibilities to serve social and economic development using space technologies and bring the benefits of space all over the world. The Access to Space for All Initiative works with various governmental actors to bring the access to space opportunities to United Nations Member States with particular attention to developing nations, to bridge the space divide.

Session 2: Access to Space Enablers

Opening Ceremony

This session will provide an overview of the different elements that are needed to maximize the benefits of space activities. This session welcomes government officials, members of academia, private sector, students and practitioners, aiming at providing a holistic view of the key elements that make space a sustainable endeavor.

Session 3a: Science, Technology and Innovation from Hypergravity and Microgravity Experimentation

The Hypergravity and Microgravity experimentation aims at developing the knowledge, engineering processes and human workforce to conduct basic science and technology experiments in hypergravity and microgravity conditions. It works as the foundation of space technology and space exploration. Hypergravity and Microgravity experimentation contains ground facility experimentation and in-orbit experimentation, research outcomes, innovation ideas and cooperation efforts are welcome in this session.

Science, Technology and Innovation from Satellite Development Session 3b:

This session provides a chance in exchanging ideas on satellite development efforts, including educational efforts for developing technical know-how, engineering processes and satellite development case studies. Participants from developing nations are especially encouraged to submit their contributions to this session.

Session 3c: Science, Technology and Innovation from Space Exploration

Thanks to an inclusive approach implemented by many space-faring countries, several developing, and space emerging nations are also dlving into space exploration. Space exploration efforts by international and national entities, space agencies, industry and civil society, reveal the latest and future approaches toward space exploration are welcome in this session.

Flash Wrap-Up Session **Closing session:**

Closing remarks

Agenda of the Workshop

09

Time	Title of Presentation	Speaker	Organisation	
Friday, 16 September 2022				
08:00 - 09:00	Registration			
Opening Ceremor	ıy			
09:00 - 09:05	Opening remarks by UNOOSA	Niklas Hedman	Director, UN Office for Outer Space Affairs (UNOOSA)	
09:05 - 09:10	Opening remarks by IAF	Pascale Ehrenfreund	President, International Astronautical Federation (IAF)	
09:10 - 09:15	Opening remarks by CNES	Lionel Suchet	Chief Operating Officer, National Center for Space Studies (CNES)	
Setting the scene				
09:20 - 9:35	Perspective from the programme committee	Jorge Del Rio Vera	UN Office for Outer Space Affairs (UNOOSA)	
09:35 - 9:40	Perspective from the programme committee	Christian Feichtinger	International Astronautical Federation	
09:40 - 9:45	Perspective from the programme committee	Myriam Cournet	National Center for Space Studies (CNES)	
09:45 - 09:50	Perspective from the programme committee	Masami Onoda	Chair, Committee for Liaison with Inter- national Organisations and Developing Nations (CLIODN)	
09:50 - 09:55	Perspective from the programme committee	Alejandro Roman	Chair, Committee on Developing Countries and Emerging Communities (ACDCEC)	
Session 1: Heads of Governmental Space Actors on Innovation, International Cooperation and Socioeconomic Benefits of Space (Panel/Round Table)				
	Chair: Niklas Hedman Rapporteur: Nonofo Angela Mogopodi, Giovanna Estefania Ramirez Ruiz:			
	Mamimba Ndjoungui Aboubakar		Deputy General Manager, Gabonense Agency for Space Studies and Observations	
	Yeshurun Alemayehu		Deputy Director General, Ethiopian Space Science and Technology Institute	

	Chair: Niklas Hedman Rapporteur: Nonofo Angela Mogopodi, Giovanna Estefania Ramirez Ruiz:		
	Mamimba Ndjoungui Aboubakar	Deputy General Manager, Gabonense Agency for Space Studies and Observations	
	Yeshurun Alemayehu	Deputy Director General, Ethiopian Space Science and Technology Institute	
	Marglad Bencomo Noguera	Executive Director, Bolivarian Agency for Space Activities	
9:55 - 11:30	Rodrigo Da Costa	Executive Director, European Union Agency for the Space Programme	
	Mohamed El Koosy	Chief Executive Officer, Egyptian Space Agency	
	Christyl C. Johnson	Deputy Director for Technology and Research Investments, Goddard Space Flight Center, National Aeronautics and Space Administration	
	Salvador Landeros	General Director, Mexican Space Agency	







VSSOCIATED EVENTS





Time	Title of Presentation	Speaker	Organisation
	Charles Maina Mwangi		Acting Director Space Sector and Technology Development, Kenya Space Agency
	Lionel Suchet		Chief Operating Officer, National Center for Space Studies
11:30 - 12:00	Coffee Break/Ice-Breaker		
Session 2: Acces	ss to Space Enablers		
12:00	Chair: Masami Onoda Rapporteur: Abhas	s Maskey	
12:00 - 12:15	Space Law as a key Access to Space Enabler	Yukiko Okumura	United Nations Office for Outer Space Affairs
12:15 - 12:30	ТВС	Angel Gonzalez	United Nations Conference on Trade and Development
12:30 - 12:45	The Role of Intellectual Property in Promoting Innovation and Access to Space Technologies	Tomoko Miyamoto	World Intellectual Property Organization
12:45 - 13:00	ТВС	Claire Jolly	Organization for Economic Co- operation and Development
13:00 - 13:15	Frequency allocations and the corresponding regulatory process for the registration and recording of frequency assignments	Chuen Chern Loo	International Telecommunication Unic
13:15 - 13:30	Exemplars from the Group on Earth Observations work programme	Steven Ramage	Group on Earth Observations
13:30 - 14:30	Lunch Break		
14:30	Chair: Pieter van Beekhuizen Rapporteur: Eden Abeselom Habteslasie		
14:30 - 14:45	Management of Space Exploration, Development and Scientific and Technological Cooperation in Space	Jesus Romero	Mexican Space Agency
14:45 - 15:00	Strategic Alliances – Key to bridging the Space Divide	Hebe Romero	Paraguay Space Agency
15:00 - 15:15	Jumpstarting the Philippines' Space Activities Through International Cooperation	Julie Ann Banatao	Philippines Space Agency
15:15 - 15:30	Activities of the Egyptian Space Agency	Somaia Mohammed	Egyptian Space Agency
15:30 - 15:45	Activities of the Space Research and Technology Agency	Ismoil Rasulov	Space Research and Technology Agency (Uzbekistan)
15:45 - 16:00	Building blocks of Indonesia's space industry	Yunita Permatasari	Indonesia Space Agency
16:00 - 16:15	Coffee Break		
16:15	Chair: Alejandro Roman Rapporteur: Gio	ovanna Estefania	
16:15 - 16:30	ТВС	Jennifer Robin Littlejohn	State Department, United States
16:30 - 16:45	The ESA solutions catalogue for the SDGs	Maria Gabriella Sarah	European Space Agency

Time	Title of Presentation	Speaker	Organisation
16:45 - 17:00	ASECNA (EGNOS - SBAS Use Cases)	Julien Lapien	Agency for Air Navigation Safety in Africa and Madagascar
15:45 - 16:00	The Journey to NigComSat-2: Lessons Learned	Alma Okpalefe	Nigerian Communications Satellite Limited
17:00 - 17:15	Space Open Data, Expertise and Capacity Building as a Game Change for Decision Makers	Jeanne Holm	City of Los Angeles
17:15 - 17:30	Small scale women farmers along Opa River in Ile-Ife: Using Access to Space to Enhance Productivity	Lami Ali Fadiora	African Regional Center for Space Science and Technology Education- English
17:30 - 17:45	Space Enabled integrated Environment- Vulnerability-Decision-Technology framework	Danielle Wood	Massachusetts Institute of Technology
17:45 - 18:00	Introduction to the University Space Engineering Consortium (UNISEC)	Rei Kawashima	UNISEC Global
18:00 - 18:15	The role of space sustainability for the space economy	Nicolas Peter	International Space University
18:15 - 18:30	The role of the youth in bridging the space divide - SGAC as an enabler for access to space for all.	Hamza Hameed	Space Generation Advisory Council
END OF DAY 1			
Saturday, 17 September 2022			
Session 2: Access to Space Enablers (Cont)			

Session 2: Access to Space Enablers (Cont)			
8:30	Chair: Alejandro Roman Rapporteur: Giovanna Estefania		
08:30 - 08:45	Access to Space for All	Jorge Del Rio Vera	United Nations Office for Outer Space Affairs
08:45 - 09:00	Building Nepal's Space Infrastructure and Community from Ground-Up through a Structured Public-Private Partnership Approach	Abhas Maskey	Antarikchya Pratisthan Nepal (Nepal Space Foundation)
09:00 - 09:15	The importance of inclusive outreach	Remco Timmerman	Spaceside OU
Session 3a: Scie	nce, Technology and Innovation from Hyperg	ravity and Microgravity E	xperimentation
9:15	Chair: Nonofo Mogopodi Rapporteur: Madiha Rasheed		
09:15 - 09:30	Utility of hypergravity as a novel tool in inducing reliable phenotype/s for improving crop plants – A relevance to terrestrial agriculture	Hosamani Ravikumar	University of Agricultural Sciences (India)
09:30 - 09:45	Microgravity Ground Facility Experimentation on Root Developments and Biochemical Characterization of Selected Vital Crops	Funmilola Oluwafemi	National Space Research and Develop- ment Agency (Nigeria)
09:45 - 10:00	Space Studies Program on Microgravity Supporting the Advancement of Technology in the fields of Space Pharma and Space Medicine	Nambiar Shrrirup	Politecnico di Torino (Italy)











Time	Title of Presentation	Speaker	Organisation
10:00 - 10:15	Sending Nepal's First School Students' Experiment to Space	Suresh Bhattarai	Nepal Astronomical Society (Nepal)
10:15 - 10:30	Human Commercial Space Activities provide an Opportunity Platform for Human Health Discoveries	Dorit Donoviel	Translational Research Institute for Space Health (TRISH) at Baylor College of Medicine (United States)
10:30 - 10:45	Spaceflight Associated Neuro-ocular Syndrome (SANS)	Scott Ritter	German Aerospace Center (Germany)
10:45-11:00	Coffee Break		
Session 3c: Scier	nce, Technology and Innovation from Space	Exploration	
11:00	Chair: Majaja Nomfuneko Rapporteur: Li	ly Rospeen Asongfac	
11:00 - 11:15	International Space Exploration Coordination Group	Christian Lange	International Space Exploration Coordi- nation Group / Canadian Space Agency
11:15 - 11:30	Benefits for the emerging countries of the exploration and use of the Moon with a perspective focused on coordination and cooperation	Rosa Maria	Mexican Space Agency (Mexico)
11:30 - 11:45	European Space Agency and Space Exploration	Thomas Weissemberg	European Space Agency
11:45 - 12:00	ТВС	Christa Peters-Lidard	National Aeronautics and Space Admin- istration (United States)
12:00 - 12:15	ТВС	ТВС	International Space Coordination Group
12:15 - 12:30	Is it possible socialize the benefits of space exploration? (Policy aspects of space exploration)	Michele Cristina Silva Melo	Brazilian Space Agency (Brazil)
12:30 - 12:45	Planetary Protection: Exploration of the Solar System in Support of Sustainable Space	Elaine Seasly/J. Nick Benardini	National Aeronautics and Space Admin- istration (United States)
12:45 - 13:00	COSPAR Planetary Protection	Athena Coustenis	Committee on Space Research
13:00 - 13:15	Space Renaissance for the Benefits of All	Bernard Foing	ILEWG LUNEX EuroMoonMars Earth Space Innovation & Space Renaissance Inter- national
13:15 - 13:30	No one shows a child the sky	Mae Jemison	100 Year Starship
13:30 - 14:30	Lunch Break		
Session 3b: Scie	nce, Technology and Innovation from Satelli	te Development	
14:30	Chair: Umamaheswaran Raman Rapporteur: Natally Mendez		
14:30 - 14:45	State of Art of Small Satellites Systems, Missions and Applications	Chantal Cappelletti	University of Nottingham (United Kingdom)
14:45 - 15:00	The First Tunisian Student Satellite	Hana Aouinet	High School of Engineering and Applied Technology (ESPITA) (Tunisia)

Time	Title of Presentation	Speaker	Organisation
15:00 - 15:15	Open-Sourcing of CubeSat Bus for Capacity Building aimed to Acquire Original Space Development Capability	Tetsuhito Fuse	Kyushu Institute of Technology (Japan)
15:15 - 15:30	NSSA Aman Payload	Yaqoob Alqassab	National Space Science Agency (Bharain)
15:30 - 15:45	Promoting quality education through CubeSat Quetzal-1, the first Guatemalan CubeSat	Cecilia Marsicovetere	University of the Valley (Guatemala)
15:45 - 15:00	CubeSat as a Platform for space Engineering Education and Training in the Philippines	Adrian Salces	Philippines Space Agency
15:00 - 15:15	CANSAT Argentina	Maximiliano Pisano	National Commission on Space Activities
15:15 - 15:30	Coffee Break		
15:30 - 17:00	Flash Round Discussion Session		
Closing Ceremony			
17:00 - 17:15	Closing remarks by CNES	Phlippe Baptiste	President, National Center for Space Studies (CNES)
17:30 - 17:45	Closing remarks by UNOOSA	Niklas Hedman	Director, UN Office for Outer Space Affairs (UNOOSA)
17:45 - 18:00	Group picture		
	END OF	THE WORKSHOP	
18:00	Participants are invited to a cocktail organized by the International Astronautical Federation		













14 - 16 September 2022 Date: The FIAP Jean Monnet Venue:



ACE GENERATION DVISORY COUNCIL

THE GLOBAL SPACE CONGRESS FOR UNIVERSITY STUDENTS AND YOUNG **PROFESSIONALS INTERESTED IN TODAY'S KEY SPACE ISSUES**

The Space Generation Congress (SGC) is the annual meeting of the Space Generation Advisory Council always held in conjunction with the International Astronautical Congress (IAC) at the same hosting country. The Delegates are ~150 top university students and young professionals with a passion for space. They are selected with a highly competitive application process open to our Space Generation international network. With SGC, SGAC aims to promote the voice of the next generation of space sector leaders on the topic of international space development.

The overarching event theme for SGC 2022 is Diversity, Access, and Inclusion, to celebrate the rich and vibrant SGAC community, discuss important aspects of DAI in the space sector and how we can create a future in space that benefits all of humanity.

Aims

The aim of the SGC is threefold:

- First, to strengthen the international network of the Space Generation Advisory Council. From the perspective of the individual delegates, many of whom come from developing countries, it is a chance to interact and engage with the incoming generation of space policy professionals from all over the world. From the perspective of the Space Generation Advisory Council, it allows us to consolidate our international links in order to best represent and facilitate the voice of the next space generation.
- Second, to examine and consider key questions that are facing the space and international community at large and to provide input to international thinking from the next generation of space professionals.
- Third, to allow tomorrow's space sector leaders to grow their network within their generation and to also have the opportunity • to interact with today's space leaders by way of our high-level speakers

SGC 2022 Programme

12:30 - 14:00 Lunch

Schedule subject to change. Please refer to the official SGC Website for the most updated version: https://spacegeneration.org/sgc2022

Tuesday 13 September 2022	
14:00 - 15:30	Moderator's Training
19:30 - 23:00	Opening Night Dinner (Sponsored by Telespazio)
Wednesday 14 September 2022	
08:00 - 08:30	Registration + Morning Coffee
08:30 - 09:00	Welcoming Speech + Intro to SGC + WG Overviews
09:00 - 09:30	Keynote Speech (TBD)
09:30 - 10:00	Keynote Speech (ESA)
10:00 - 11:00	Fireside Chat (Blue Origin)
11:00 - 12:30	Working Group Time

14:00 - 14:30	Keynote Speaker (TBD)
14:30 - 15:00	Keynote Speaker (Telespazio)
15:00 - 15:45	Coffee Break + Art Exhibition
15:45 - 16:30	Careers Panel (Airbus + Voyager)
16:30 - 17:00	Keynote Speech (TBD)
17:00 - 18:45	Working Group Time
18:45 - 19:00	SGC Day 1 Closing Remarks
19:00 - 19:30	Travel to Venue for Evening Event
19:30 - 23:00	International Night (Sponsored by MAXAR)

Thursday 15 September 2022

08:00 - 08:30	Welcoming + Morning Coffee
08:30 - 09:00	SGC Day 2 Welcome + Awards Ceremony
09:00 - 09:30	Keynote Speech (TBD)
09:30 - 10:00	Keynote Speech (Loft Orbital)
10:00 - 12:30	Working Group Time
12:30 - 14:00	Lunch
14:00 - 14:30	Keynote Speech (NASA Exploration)
14:30 - 15:00	Keynote Speech (UK Space Agency)
15:00 - 15:45	Coffee Break + Art Exhibition
15:45 - 17:00	Space Sustainability Panel
17:00 - 18:45	Working Group Time
18:45 - 19:00	SGC Day 2 Closing Remarks
19:00 - 19:30	Travel to Venue for Evening Event
19:30 - 23:00	Space Night (Sponsored by Airbus)

Friday 16 September 2022		
08:00 - 08:30	Welcoming + Morning Coffee	
08:30 - 09:00	SGC Day 3 Welcome + Photos	
09:00 - 10:00	Heads of Agencies Panel (TBC)	
10:00 - 11:00	NASA SCaN Panel	
11:00 - 12:30	Working Group Time	
12:30 - 14:00	Lunch	
14:00 - 15:15	NOAA Panel	
15:15 - 15:45	Keynote Speech (UNOOSA)	
15:45 - 16:00	Short Break	
16:00 - 17:30	Working Group Presentations	
17:30 - 18:00	SGC Closing Remarks + Closing Speech	
18:00 - 19:00	Travel to Venue for Evening Event	
19:00 - 23:00	Gala Dinner	

NASA SCaN Workshop







73 rd INTERNATIONAL ASTRONAUTICAL CONGRESS 18 - 22 SEPTEMBER 2022, Paris, France



Saturday 17 September 2022

8:30 - 8:45	Welcoming
8:45 - 9:30	Keynote Speech - Badri Younes
9:35 - 10:00	Lecture N°1 - Marcus Watkins
10:05 - 10:30	Lecture N°2 - Brian Quinn
10:30 - 11:00	Coffee Break
11:05 - 11:30	Lecture N°3 - Julia Ross
11:35 - 12:00	Lecture N°4 - Victoria Samson
12:00 - 12:30	Activity Introduction and Team Organization
12:30 - 14:00	Lunch
14:00 - 15:00	Workshop Activity
15:00 - 15:30	Coffee Break
15:30 - 17:00	Workshop Activity
17:00 - 17:15	Presentation and Feedback
17:15 - 17:30	Closing Remarks

3 **Social Events**

Welcome Reception

Date: Sunday 18 September 2022 Time: 19:30 - 22:00 Location: Level 3, Hall 7, Paris Convention Centre

To celebrate the IAC 2022, we will have a Welcome Reception with food and beverages.

Sponsored by:



Gala Dinner

Date: Thursday 22 September 2022 Time: 19:00 to 23:30 Location: Musée des Arts Forains – Dress code : formal Cost: 195,00 € (VAT incl.)

As you pass through the gates, we will change of era. You will be in 1900, the golden age of the carnival.

Built at the end of the 19th century by a student of Gustave Eiffel in the center of Paris, the Gala Dinner venue, made of millstone, houses the reconstitution of a fair from yesteryear with its rides and attractions.

You will have the possibility of using the century-old rides at your leisure for an unforgettable time traveling experience.

Transportation Directions from the Paris Convention Centre:

- By congress shuttle buses from 18:00 to 18:45 (at the entrance of the Paris Convention Centre / Limited seats)
- By public transportation (40 minutes)
- Please take Metro Line 12 direction Mairie d'Aubervilliers, change at Madeleine to Metro Line 14 direction Olympiades, stop at Cour Saint Emilion and walk 300 meters
- By taxi (20-45 minutes)

Sponsored by: MAXAR













IAF Awards 2021 4

4.1 IAF World Space Award

The IAF World Space Award is presented for an outstanding contribution or contributions in space science, space technology, space medicine, space law or space management of exceptional impact to the world's progress in astronautics.

The recipient of this year's award is the Tianwen-1 Spacecraft Development Team.





"The Tianwen-1 Spacecraft Development Team offered an innovative option for successful Mars exploration and outstanding contributed to the advance in deep space exploration technology. Tianwen-1 Mission achieved orbiting, landing, and roving on Mars in one mission for the first time globally. The scientific data acquired during the mission made an essential contribution to a deeper understanding of Mars and the solar system."

4.2 IAF Excellence in International Cooperation Award

The IAF Excellence in International Cooperation Award is presented annually to an individual who has demonstrated excellence in their efforts to promote and facilitate global engagement and cooperation in the space sector.

In 2022 the award has been bestowed to:



Fredric NORDLUND

Head of the European and External Relations Department, Directorate of European, Legal and International Matters European Space Agency (ESA), France

"Throughout his professional career, above and beyond the cooperation with the 22 ESA member states, Mr. Nordlund was closely involved with many international organisations such as the National Aeronautics and Space Administration (NASA), Japan Aerospace Exploration Agency (JAXA), China National Space Administration (CNSA), Russian Federal Space Agency (Roscosmos), Indian Space Research Organisation (ISRO), Korea Aerospace Research Institute (KARI), National Oceanic and Atmospheric Administration (NOAA), Instituto Nacional de Pesquisas Espaciais (INPE), and the Canadian Space Agency (CSA). In many international space endeavours, he established himself as a true ambassador of a world-wide international cooperation to the best benefit of space science, human spaceflight, exploration and applications. In this, he was always ensuring a collaborative spirit amongst members of the space community over more than 30 years".

4.3 IAF Excellence in "3G" Diversity Award

The IAF Excellence in "3G" Diversity Award is intended to recognize IAF member organizations (industry, government, academia) worldwide for outstanding contributions to the fostering of "3G" (Geography, Generation, Gender) Diversity within the space sector.

The highest standards in "3G" Diversity can be achieved both by organizations and within teams' activities. To correctly represent this the IAF Honours and Awards Committee (HAC) decided to divide the IAF Excellence in "3G" Diversity Awards in two corresponding categories.

The recipient of this year's award are:

National Space Science Agency (NSSA) of Bahrain



"NSSA is nominated for their outstanding contribution and commitment to the 3G diversity in their workforce, leadership, promotion of their programs and for their exceptional drive and achievements in this short period of time due to their determination and diversity in the space community."

UK Space Agency Education and Skills Team



"The UK Space Agency Education and Skills Team uses space to inspire an interest among young people in STEM, encouraging them to aspire to rewarding careers in the space sector and ensuring they have the skills and experience needed to become valuable members of the space workforce. During 2021, the combination of programmes they run engaged over a million young people with space activities for at least half an hour each and has supported 68 students with 2-month work placements or space studies at the International Space University"











IAF Excellence in Industry Award 4.4

The IAF Excellence in Industry Award is intended to distinguish an industry organization, member or non-member of the IAF, for introducing innovative space technologies to the global marketplace and being recognized throughout space industry for successfully executing a landmark space mission.

Considering the importance that Small and Medium enterprises have within the space sector, starting from 2022 the IAF introduced a new category for the award dedicated to the SMEs.

The recipient of this year's awards are:

ArianeGroup



"ArianeGroup is a world leader in access to space, working for its institutional and commercial customers and Europe's strategic independence. ArianeGroup designs and creates innovative and competitive launch systems, offering civil and military space solutions for its institutional, commercial and industrial customers. ArianeGroup is expert in the most cutting-edge technologies, from all aspects of complete propulsion systems right down to the items of equipment and materials. It leverages all of this expertise, the unique knowledge of its teams, into benefiting the space, defense, energy, and other industrial sectors, with high value-added products, equipment and services"

Nanoraks (SME's Category)



"The Bishop Airlock is the first commercial element of the Space Station, built with private funds. It is the most recent in a line of Nanoracks owned and marketed hardware on the ISS. The hardware, which is used for research and technology demonstration, is open to commercial, educational, and government users, and is the first step towards a commercial space station."

4.5 IAF Hall of Fame

The IAF Hall of Fame is intended to create a standing forum of personalities that have contributed substantially to the progress of space science, technology, and space benefits to mankind. It will consist of a permanent gallery of these personalities, including a citation, biographical information, and a picture, in a special part of the IAF web presence.

The recipients of this year's award are:



Ryojiro AKIBA Professor Emeritus, University of Tokyo, Former Director General, Institute of Space and Astronautical Science,

"Dr. Ryojiro Akiba has made outstanding contributions to the development of space engineering and space science throughout his illustrious career, and is worthy of being inducted into the IAF Hall of Fame"



Jaques ARNAULD Ethic Adviser, Centre National d'Études Spatiales (CNES), France

"Why go into space? Ethical interrogation as the new and ultimate frontier."



Simonetta DI PIPPO

SEE Lab (Space Economy Evolution Laboratory). SDA Bocconi School of Management,

"One-of-a-kind career in space activities. Visionary Leader, innovative thinker, highly skilled manager, STEM advocate, international complex programs, expert in change management, outstanding negotiator with globally recognised diplomatic skills, commercial space and space economy, one of the strongest supporters of space activities for sustainable socio-economic development and a firm believer in cooperation in space."



Staff, Chief Technology Office Lockheed Martin Corporation, United States

"For his visionary leadership in the advancement of the mission of the International Astronautical Federation, the promotion of international dialogue and cooperation and the inspiration and preparation of the workforce of tomorrow."







4.6 Frank J. Malina Astronautics Medal

LIU Zhusheng Chief Designer,

China

Technology (CALT),

China Academy of Launch Vehicle

Since 1986, the Frank J. Malina Astronautics Medal is presented annually to an educator who has demonstrated excellence in taking the fullest advantage of the resources available to them to promote the study of astronautics and related space sciences.





Shinichi NAKASUKA Professor, Department of Aeronautics and Astronautics, School of Engineering, University of Tokyo Director.

Intelligent Space Systems Laboratory (Nakasuka-Funase Laboratory), Japan

Professor Nakasuka has been working for Department of Aeronautics of University of Tokyo for 31 years, during which he has been developing many micro/nano/pico-satellite including the world first CubeSat, and established one style of education based on these projects. His effort was not restricted to student education in his university, but also he has contributed to education of other universities and high school students in Japan as well as students and professors of many foreign countries. He established university community "UNISEC" which catalyzed launch of 58 university satellites in Japan and extended it to an international community "UNISEC-GLOBAL," in which he organized various educational events internationally. Through these educations, many excellent researchers and engineers grew up and contributed to the space development activities all over the world, such as project managers of JAXA projects, CEOs or CTOs of venture companies and professors of foreign universities who has initiated satellite based education.

"Liu Zhusheng, the space technology leader, the chief designer on the first manned space mission in China, has proven himself to be a

subject expert in his current position and showed great efforts to enhance the reliability and safety of China manned rockets."

IAF Interactive Presentations Competition Award 4.7

To be announced on Wednesday 21 September during the IP Award Ceremony at 12:45 in the IP Area. The five best Interactive Presentations of the IAC 2022 will be awarded during a dedicated ceremony to be held just before the Interactive Presentation Session. A dedicated jury has chosen one winner for each of the five categories:

- A. Science and Exploration
- B. Explorations and Operations
- C. Technology

Frank J. Malina

(1912 - 1981)

- D. Infrastructure
- E. Space and Society

This event will kick-off the IP Session and the IP cocktail reception, so do not miss your chance to mingle with the presenters and make sure to join us in the IP Hall!

4.8 Luigi G. Napolitano Award

The Luigi G. Napolitano Award is presented annually by the Space Education and Outreach Committee (SEOC) of the International Astronautical Federation to a young scientist, below 30 years of age, who has contributed significantly to the advancement of the aerospace science and has given a paper at the International Astronautical Congress on the contribution.

The Luigi G. Napolitano Award will be given during the closing ceremony. The award was donated by the Napolitano family and consists of the Napolitano commemorative medal and a certificate of citation. The Luigi Gerardo Napolitano Society sponsors this annual award.









Luigi G. Napolitano (1912 - 1981)

INTERNATIONAL ASTRONAUTICAL CONGRESS 18 - 22 SEPTEMBER 2022, Paris, France

Sponsors and Media Partners



Notes





JGC JGC CORPORATION



23 - 25 MAY 2023 OSLO, NORWAY

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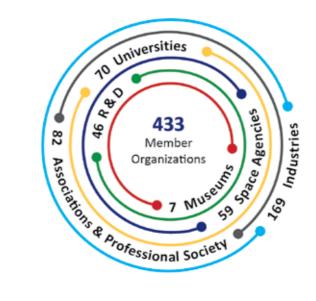
GLOC 2023 will address various topics of interest in relation to space and climate change with a specific focus on:

- Climate change impacts on the environment
- Applications and services driven by climate change
- Impacts of a changing climate on policy and law
- Commercial opportunities created by a changing climate
- Present and future international collaboration on space missions related to climate change
- Social, communications, economic and cultural dimensions of environmental change

Join us for the GLOC 2023 RECEPTION!

IAC 2022, Monday 19 September 17:00 - 17:45 Norwegian Pavillion (Booth D10)

Join the IAF, the world leading space advocacy body!



Become an IAF Member

- Download the Application Form on www.iafastro.org
- Participate in the IAF Committees in charge of defining the Technical Programme 1
- Propose to host a Plenary Event during the IAC 1
- Propose a Global Networking Forum (GNF) Event to showcase your organization's latest achievements or to discuss the most interesting topics about Space
- Participate and vote in the General Assembly and nominate IAF Officers
- 1 Host one of our events!

JOIN US





Download the Application Form on our website (www.iafastro.org) or request it to the Secretariat.



We will review your application

and ask in case of missing

information.







will be recommended by the **IAF General Counsel**

For more info:







requested documents.



Once reviewed, your application





Send everything to our Secretariat. (info@iafastro.org)





Final approval by the General Assembly during the IAC.

Connecting *@ll* Space People

THE SKY IS NOT OUR LIMIT Proudly at the heart of the return to the Moon

Out of necessity, or indeed curiosity, from the beginning of time humankind has always explored. Our desire to discover continues today and is now fuelled by a spirit of collaboration and responsibility. No wonder we're so thrilled that Airbus is playing a pivotal role in the NASA Artemis missions to return astronauts to the Moon. Together with the European Space Agency, we're providing what they need to stay alive on board the Orion spacecraft, as well as keeping it moving. After all, this odyssey is not a space race; it is humanity venturing out together to learn and pioneer new technologies, enabling us to stay longer on the Moon.

