



IAF President's Welcome

Dear IAF Friends,

I am delighted to welcome you to the May edition of the International Astronautical Federation Newsletter. It is a privilege to address our esteemed community, reflecting on recent achievements and anticipating the exciting milestones ahead.



One of the key focuses for the Federation is to foster the principles of "3G" (Geography, Generation, Gender) diversity. It is worth mentioning that the IAF demonstrated progress in promoting diversity through the growth in geography (up to 132 countries) and the increased submission of abstracts by the younger generation (over 43% of submissions were from students). Additionally, data indicate a narrowing gap between genders, from 60% to 40%, reflecting strides towards gender equality within the industry. We continue to support these "3G+" initiatives through our dedicated International Platform for Diversity and Equality in Astronautics (IDEA).

During the IAF Spring Meetings in Paris many important preparations took place, and several decisions were made concerning the IAF's upcoming Congress. I thank our dedicated IAF IPC members for their tireless efforts in curating and advancing selected abstracts, showcasing the depth of expertise within our community. They were faced with the challenging task of selecting the best abstracts and proposals among the many submissions received this year.

Highlighting the substantial growth of Sustainability, Investment, and Security (SIS) topics in recent years is important. Notably, the Technical Programme for IAC 2024 saw a remarkable surge, with SIS topics covering 30.5%, marking a significant increase of 22.3% since the launch of the SIS agenda. Additionally, 35.5% of GNF submissions pertain to SIS topics. Moreover, approximately a third of Plenaries submissions focus on SIS topics, indicating a definite increase compared to previous years.

On behalf of the International Astronautical Federation (IAF), we value IPC members' input and involvement and extend our gratitude to everyone who has participated in this ambitious and arduous exercise. Congratulations to those whose abstracts and proposals were selected!

We eagerly anticipate the upcoming 75th International Astronautical Congress (IAC 2024) in Milan. With record-breaking attendance on the horizon, this flagship event reaffirms the IAF's position as the premier global platform driving progress in the space industry.

I invite you all to join us in Milan for what promises to be an unparalleled experience of knowledge exchange, collaboration, and celebration of our collective achievements.

Clay MOWRY
IAF President

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IAF EVENTS & NEWS

- IAF Spring Meetings 2024
- IAC 2024 – Milan, Italy
- GLEX 2025 – New Delhi, India
- IAC 2025 – Sydney, Australia

IAF MEMBERS' CORNER

OUR LATEST PUBLICATIONS

- [IAF Highlights 2023 Journal](#)
- [IAC 2024 Brochure](#)

IMPORTANT DATES:

- Webinar on IAC 2024 Selected Abstracts Preparations: **16 May 2024**
- Call for Late-Breaking Abstracts – Deadline for submission: **27 May 2024**
- Call for the 31st UN/IAF Workshop – Deadline for registration: **9 June 2024**
- IAC 2024 Early bird registration deadline: **30 June 2024**
- The International Space Forum at the Ministerial Level (ISF 2024): **2 July 2024**
- IAC 2024: **14 – 18 October 2024**



Connecting @ll Space People





2024 IAF SPRING MEETINGS: Preparing for the World's Premier Global Space Congress in Milan

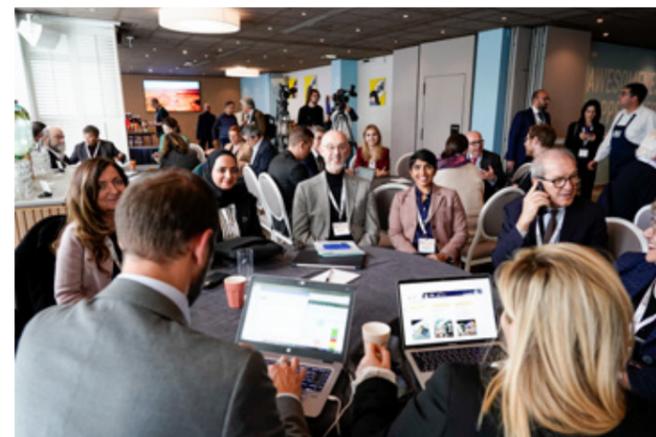
Spring Meetings 2024

More than 500 participants joined the annual IAF Spring Meetings in Paris on 26 – 28 March 2024. During these three days many important preparations took place, and several decisions were taken concerning the IAF's upcoming events.

The IAF Spring Meetings began with the IDEA Day, aimed at fostering diversity within the space sector. During the morning breakfast a lively panel, moderated by IAF Vice President for Diversity, Mishaal Ashemimry, discussed the challenges and opportunities the Next Generation faces when taking up

leadership positions both within the IAF and more generally in the global space sector. During the lunch session, IAF Executive Director Christian Feichtinger gave a very data-focused presentation on the progress made by the Federation in fostering diversity and inclusion since the establishment of the IDEA "3G" Programme in 2015.

During the IAF Spring Meetings the IPC members were faced with the challenging task of selecting the best abstracts among the many submissions received this year.



View the [YouTube video playlist](#)



View the [flickr photo album](#)



The unprecedented and mind-blowing results received in response to the Calls for Proposals for the 75th International Astronautical Congress to be held on 14-18 October 2024 in Milan set the stage for what will be the most successful and spectacular IAC ever. You do not want to miss that!

A record-breaking number of nearly 7000 abstracts for oral and interactive presentations were submitted for the IAC 2024 Call for Abstracts, which surpasses the number of submissions of all previous congresses. This impressive figure reflects an extraordinary 30% growth since the last record from IAC 2022, underscoring the palpable excitement and enthusiasm for the world's premier global space event. Out of all abstracts 2265 have been selected as oral presentations, 1857 have been selected as interactive presentations and 509 abstracts have been retained as back-up. Thanks IAC 2024 host, AIDAA, and co-hosts, ASI and Leonardo for accommodating a record number of 198 sessions for oral presentations and having doubled the number of IP sessions up to 90 digital screens.

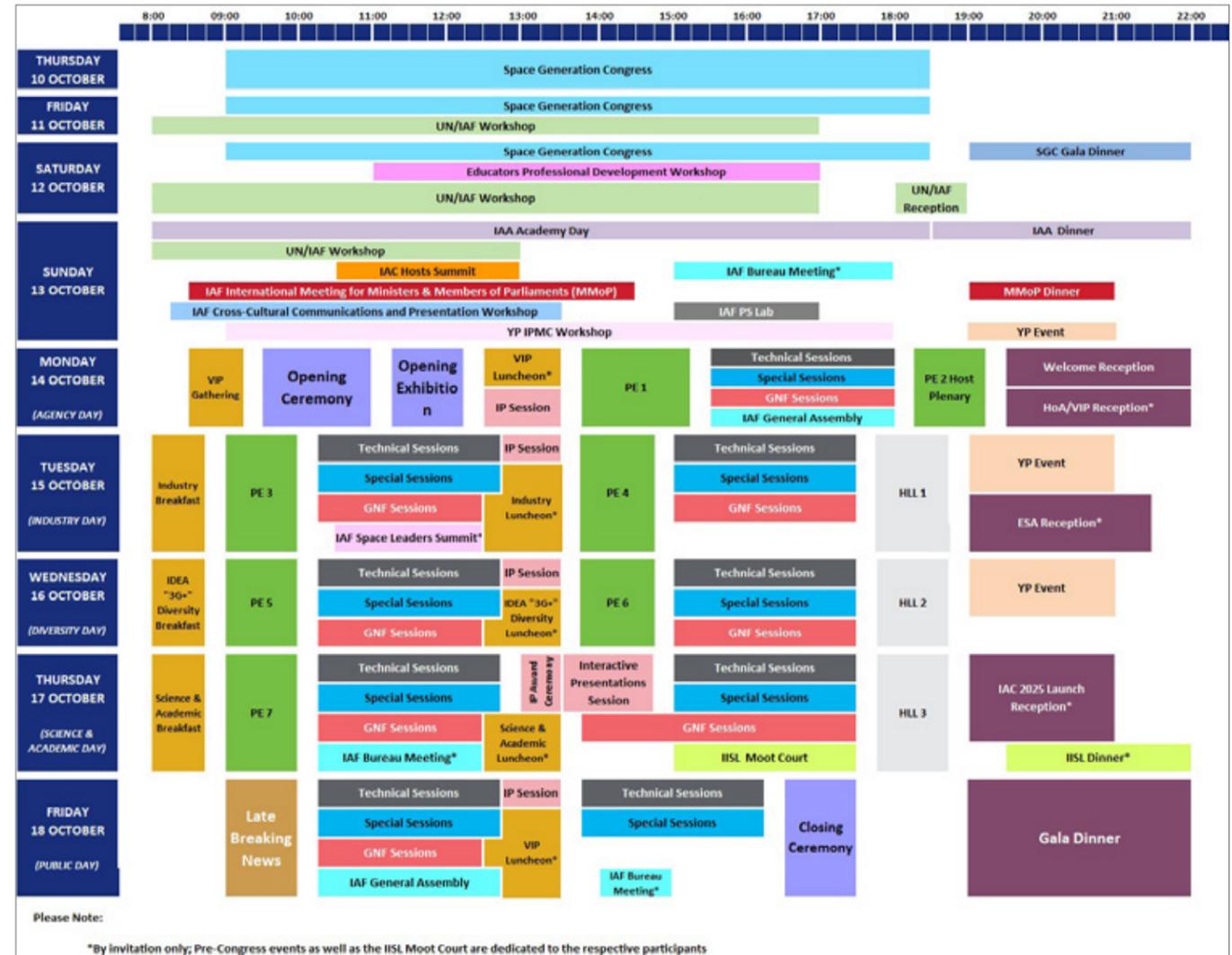
Most striking is the increased number of countries and new space actors from emerging ecosystems joining the IAC community. Submissions for IAC 2024 came from a phenomenal number of 106 countries and 2295 organizations across the globe, showing our dedication to pushing boundaries for more diversity and embracing inclusion!

This year's call for Plenaries and Highlight Lectures exceeded expectations, with the incredible number of 60 proposals received. After careful consideration, we are delighted to announce that the IPC Steering Group has selected 5 Plenary sessions and 2 Highlight Lectures to be presented at the IAC 2024 in Milan.



[Register here for IAC 2024](#)

IAC 2024 Conference at a Glance



You can find below the list of Plenaries and Highlight Lectures selected:



- PE1: One-to-One with Heads of Agencies
- PE2: Host Plenary: Responsible and sustainable space exploration: Moon to Mars
- PE3: New lunar frontiers: how the non-space industry is unlocking future markets, proposed by ispace (Industry Category)
- PE4: Value of Resources: Recipe for In-Situ Resource Utilization on Space Frontiers, proposed by JAXA (Exploration Category)
- PE5: Intelligent Space: Big Data, Advanced Algorithms, and Autonomous Robotics in Space, proposed by IAF WD-YPP, SGAC (Next Generation Category)
- PE6: Observing the Earth, Serving our Societies: Space in the Age of Climate, proposed by CNES, ASI, NOAA (Environment Category)
- PE7: New Opportunities benefit Human Space Flight on Earth, in Space and Beyond, proposed by Chinese Academy of Sciences (Emerging Countries/Other Category)
- HLL1: Euclid Mission: unveiling the Universe, proposed by ESA/CNES (Exploration Category)
- HLL2: Viewing the freshwater crisis from space: A world of drought and flood extremes, proposed by NASA-JPL (Environment Category)
- HLL3: IAF World Space Award Highlight Lecture

[More info on the Plenary Programme](#)

Category	Plenaries
Heads of Agencies	One to One with Heads of Agencies
Host Plenary	Responsible and Sustainable Space Exploration: Moon to Mars
Industry	New lunar frontiers: How the Non-Space Industry is Unlocking Future Markets
Exploration	Value of Resources: Recipe for In-Situ Resource Utilization on Space Frontiers
Environment	Observing the Earth, Serving our Societies: Space in the Age of Climate Change
Next Generation	Intelligent Space: Big Data, Advanced Algorithms, and Autonomous Robotics in Space
Other	New Opportunities benefit Human Space Flight on Earth, in Space and Beyond

Category	Highlight Lectures
Exploration	Euclid Mission: Unveiling the Universe
Environment	Viewing the Freshwater Crisis from Space: A world of Drought and Flood Extremes
Award	IAF World Space Award Highlight Lecture

And the Special Sessions selected:



#1	Gaggero, Mauro	A1	Plant Cultivation in Space for Food Production and Resource Regeneration: Opportunities, Constraints, and Advances in Technology
#2	Governale, Giuseppe	E1	Empowering Tomorrow's Space Visionaries: Exploring Multidisciplinary Pathways to Space Exploration
#3	McKnight, Darren	A6	Orbital Debris Remediation – Accelerating Active Debris Removal (ADR)
#4	Sumini, Valentina	B3	AI-enabled Self-Reliant Design, Construction, and Operations of Adaptable Deep Space Habitats
#5	Norton, Charles	A3	The Next Technology Breakthrough to Drive Transformational Space Science Discovery
#6	Wolf, Thomas & Behar-Lafenetre, Stéphanie	D4	In-Space Servicing Assembly & Manufacturing (ISAM) – Shaping a Future Safe, Secure and Sustainable Space Ecosystem
#7	Brovelli, Maria Antonia	B1	Sustainable Cities and Communities: which role for Cubesats?
#8	Pinto Gomes, Vera	B5	Space Supporting a World of 8 Billion People
#9	Seguin, Guy	B1	Responsible and Sustainable Advances in SAR Mission and Technology
#10	Oqab, Haroon B.	C3	Future Solar Power Satellites: Space Sustainability for Clean and Secure Energy from Space for Earth
#11	Gramling, Cheryl	B2	"Excuse Me, Can You Direct Me to Shackleton Crater? [Applying Novel Solutions to the Challenges of Lunar Position, Navigation, and Timing]"
#12	Guliyeva, Sona	E1	Geoinformation Technologies for Sustainable Development (GIT4SD): Promoting Responsible Space Data Analysis in Emergency Response

#13	Crisp, Nicholas H.	D1	Very Low Earth Orbits (VLEO) – Development and Engagement of the Growing Community of Interest towards Sustainable Lower Altitude Operations
#14	Carrera, Erasmo	F	Space It Up! Collaborative Innovation in Space Science & Technology
#15	Nekola Novakova, Julie	E1	It's Full of Stars: Storytelling for Space Outreach
#16	Nayyer, Mahhad	E9	Interactive Workshop on Space Sustainability: Defining Space Sustainability, Together
#17	Walter, Christian	A3	ESA Moonlight: Lunar Communication and Navigation Services for the Lunar Economy
#18	Zolea, Sirio	E3	A Hard Working Sol on Mars: a Governance Role-Play

More info on the Special Sessions (SpS)

The Call for IAC 2024 Late Breaking Abstracts (LBA) is open for two weeks!



The Call for **Late Breaking Abstract (LBA)** for the 75th International Astronautical Congress is now open and will run till **27 May** (23:59 CEST) to enable recent research findings to be included as Interactive Presentations (IP) in the IAC 2024 Technical Programme.

This call allows for the submission of **truly ground-breaking and innovative findings, high-impact scientific research** for which results **were NOT available** at the time of the regular abstract submission deadline (11 March).

By submitting an LBA, you agree - if it is selected - to commit to present your research in-person in Milan as an **Interactive Presentation and to submit a full paper**.

How to submit your LBA?

- Connect to <https://iafastro.directory/iac/account/login/> to get started;
- Go to Submission System and select IAC 2024 Late Breaking Abstract (LBA);
- Select an appropriate Symposium to which your abstract will be submitted based on the topic that is most relevant;
- Submit a 150-word abstract with a title.

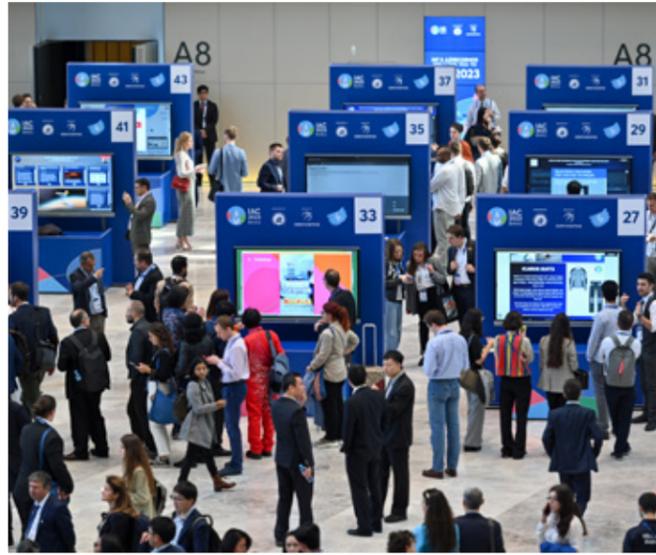
Eligibility criteria

- Abstracts considered as **"Late-Breaking"** must report new data or important recent findings in space which merit special consideration after the standard abstract deadline (11 March);
- Case studies or encore abstracts will not be accepted;
- Late-breaking abstracts must not be a revision of an abstract submitted prior to the original submission deadline, and must not have been presented, accepted for presentation, or published at any other scientific meeting or journal at the time of submission;
- **Multiple LBA submissions per author are NOT allowed.**

Main deadlines

- Call for LBA is open from 13 to 27 May 2024 – there will be no extension;
- Selection results will be announced by mid-June 2024;
- The presenting author of the abstract must complete registration by 6 September 2024;
- The Interactive Presentation must be submitted by 17 September 2024;
- The manuscript must be submitted by 20 September 2024.





Should you have any questions, please contact us at ipsupport@iafastro.org

If you strongly believe your abstract qualifies as groundbreaking, we welcome your submission!

- [Submit your LBA](#)
- [Check IP Roadmap](#)
- [Join Webinar "How to Ace your IAC Presentation"](#)
- [Contact](#)



Speakers are selected via a call for abstracts. The Call for Abstracts of the UN/IAF Workshop is open until 9 June 2024.

GLEX 2025

GLEX 2025 COMES TO INDIA

The Global Space Exploration Conference (GLEX) is an esteemed gathering that brings together experts, and enthusiasts from around the world to delve into advancements and future prospects of space exploration.

The upcoming GLEX 2025 will take place on 7-9 May 2025, in New Delhi, India.. Anil KUMAR, the IAF Vice President for Relations with International Organizations and the Associate Director of the Indian Space Research Organisation (ISRO), presented an overview of the plans and programmes for the GLEX 2025 during the IAF Spring Meetings 2024 (https://youtu.be/p4yJSEJpWxY?si=B_J2IKqmiHLLBtK9).

The focus of GLEX 2025 will revolve around the theme of space exploration's pivotal role in shaping the future, particularly amidst the surge of lunar activities spearheaded by various countries. With Indian Space Research Organisation (ISRO) as a host, the conference will delve into the latest developments, challenges, and opportunities in lunar exploration and beyond.





IAC 2025

JOIN US IN SYDNEY, AUSTRALIA FOR THE 76TH INTERNATIONAL ASTRONAUTICAL CONGRESS (IAC)

Sydney, Australia will host the 76th International Astronautical Congress (IAC) from 29 September to 3 October 2025. This follows the signing of the agreement between the International Astronautical Federation (IAF) and the Space Industry Association of Australia (SIAA), backed by the Australian Space Agency and the NSW Government.

IAF Executive Director, Christian Feichtinger, said, "Sydney, Australia is the perfect host for IAC 2025, and will deliver on the IAF's vision of sustainability, investment, and security."

The International Astronautical Congress has been organized two times prior in Australia, most recently in 2017 with the 68th IAC in Adelaide and before that the 49th IAC in Melbourne 1998. The IAF is delighted to return once again to this captivating continent in Oceania and to bring the IAC to the beautiful harbour city, Sydney. SIAA has already proven to be an excellent host and the 76th IAC vows to be an outstanding event.

SIAA's Executive Chairman, Jeremy Hallett remarked, "Over the next two years, we will see more Australian space companies launching into orbit than in our entire history, proving Australia is on an incredible growth trajectory and is developing sovereign space capabilities which are critical to our nation's economic advancement, resilience and security".

From 4,500 delegates hailing from 84 countries in Adelaide in 2017, IAC Sydney 2025 expects to deliver a minimum fifty per cent increase in attendance (circa 7,000+ delegates) from over 100 countries, with over half of the attendees under 35 years of age.

The theme of IAC Sydney 2025 is "Sustainable Space: Resilient Earth" which will set the stage for important discussions such as: space-based application for earth; sustainable space

activities; and sustaining life off earth. Key focus areas include showcasing the Asia Pacific region, inspiring and engaging the next generation's space workforce, engaging a broad range of industries, and educating the community about 'why space matters' through the IAC's open day.

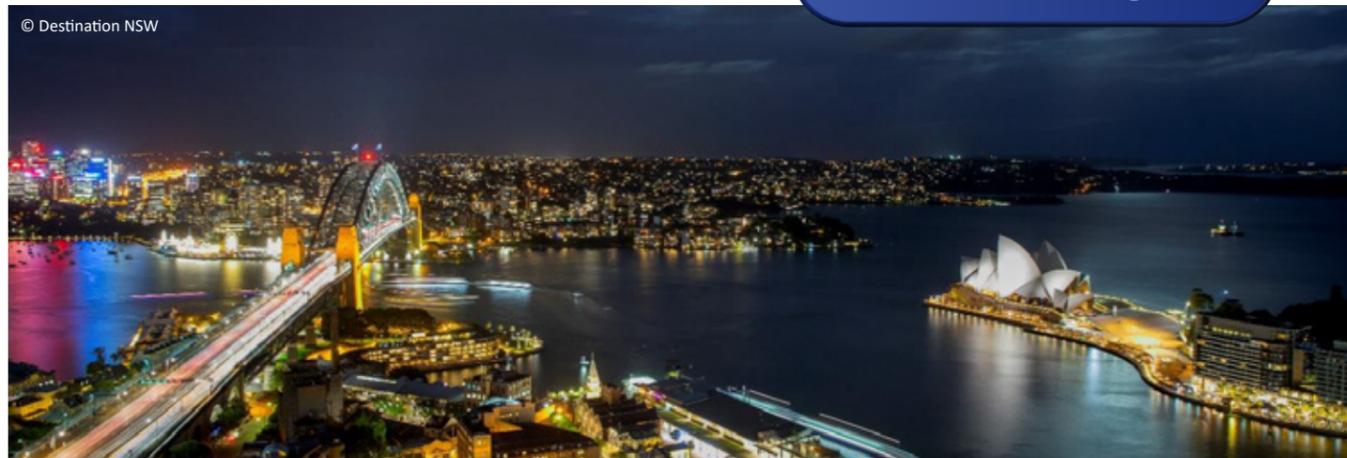
Australian Space Agency Head, Enrico Palermo, said, "Australia's space ecosystem looks very different to what it did the last time we hosted the IAC. IAC 2017 saw the announcement of the Australian Space Agency, which has driven remarkable growth of our industry and space infrastructure."

"IAC 2025 gives us a platform to show the world how far Australia has come, as well as spotlighting the opportunity that exists for the entire Asia-Pacific region to contribute even further to global space endeavours."

"It also provides a unique chance for us to engage the community and demonstrate how space is essential to maintaining and improving our everyday lives, as well as making our economy stronger and our industries more advanced."

NSW Minister for Industry and Trade, Anoulack Chanthivong, said, "NSW is home to over 30 per cent of the nation's space businesses, so we're well placed to host this crucial international meeting. We look forward to welcoming the international space community to Sydney in 2025 and showcasing the huge opportunities available in our region. IAC Sydney 2025 isn't just an event, it's a unique chance to highlight our leadership and the big benefits a growing and vibrant space industry can deliver to NSW and the nation."

Register your interest online at www.iac2025.org



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NEWS!



The Aerospace Aviation Congress Interdisciplinary International welcomes you!

"Together for a better world" is the motto of the Aerospace Aviation Congress Interdisciplinary International which will be held on Wednesday, February 12th, 2025 in Nuremberg, Germany. The Congress is open to innovative companies that are scientists and engineers, astro-cosmonauts and professionals involved in exploring the technological challenges and business opportunities.

Bringing together world-class leaders and decision-makers in aerospace and aviation industry and research, this congress is the perfect venue to exchange new ideas and trends with key industry experts and professionals.

Profit from the discreteness and direct communication of the AACII congress avoiding the huzzle and complexity of the larger trade fairs. And the interdisciplinary approach of this congress makes it possible to benefit from the experiences of intelligent people and the presentation of the latest revolutionary technologies in various areas such as digitalization Industry 4.0 and artificial intelligence, environment and climate change.

Explore exciting theme parks presenting aerospace, satellites, automotive new mobility, drones PAV/UAM and new generation or join the forums about aviation, space and more.



We are delighted to invite the distinguished members of the IAF community to connect and expand your network on the second edition of the AACII in Nuremberg, Germany!

We are looking forward to seeing you on the AACII Congress next year!



We kindly invite you to participate in the VIIth Space Resources Conference - Towards Artemis Generation to be held on May 23-24, 2024, Kraków, Poland.

The Space Resources Conference is fast approaching - for the seventh time we will meet to jointly explore knowledge and exchange new ideas related to the space industry. Space Resources Conference is an event that attracts researchers and practitioners from all over the world and provides an opportunity to develop, broaden horizons and make valuable contacts.

The topics of the presentations will include issues and priorities preferred by space research programs implemented within the European Union and beyond! This year's edition is also dedicated to the Artemis program.

KGK
SPACE RESOURCES CONFERENCE

**VIIth Space Resources Conference
Towards Artemis Generation
KRAKOW | POLAND
23-24 May 2024**

Welcome to the VIIth Space Resources Conference - Towards Artemis Generation, scheduled for May 23-24, 2024, in Kraków, Poland.

The Space Resources Conference is approaching fast - for the seventh time, we will meet to jointly explore knowledge and exchange new ideas related to the space industry. Researchers and practitioners from all over the world are invited to attend the Space Resources Conference, which provides an opportunity to develop, broaden horizons and make valuable contacts. Space Resources Conferences are organized to provide an open forum for discussion on the state-of-the-art technologies applicable to the current challenges of space exploration and the use of space resources to improve the living conditions of humans and protect Earth's natural environment. The post-conference publication will be published by Springer Nature.

<https://spaceconf.org>

When?
Conference: May 23-24, 2024

Where?
AGH University in Kraków, Poland

Who can take part?
We invite scientists, practitioners, students, representatives of companies and local governments, as well as state administration employees.

The conference aims to exchange information on space research. Great emphasis will be placed especially on topics related to research on the so-called sustainable cosmos and the impact of space on humans.

➔ More information about the conference: www.spaceconf.org

➔ Link to registration and submission of abstracts: <https://systemcoffee.pl/?lang=en&go2rej=1&kid=1510>



The Programme of the 30th AIAA/CEAS Aeroacoustics Conference (Aeroacoustics 2024) has been published on the congress website! The event, which will be held in Rome on June 4-7, 2024, is the premier international forum for the field of aeroacoustics, providing an exceptional opportunity for scientists and engineers from industry, government, and academia to exchange knowledge and results of current studies and to discuss directions for future research.

The program's technical content includes theoretical, experimental, and numerical contributions that describe original research results and innovative design concepts.



AIDAA was a partner of the 5th Italian Space Startup Competition (ISSC), and contributed to the success of the 5th Edition of the Italian Space Startup Competition as a Partner! During this two-day event, organized by the Space Generation Advisory Council (SGAC) and hosted by the Italian Space Agency in Rome, both students and young professionals had the opportunity to interact with specialists in the space field and to work in teams to shape their ideas for innovative space startups.

AIDAA offered a Special Prize to the Probecrop team that was granted based on the technical quality of the startup proposal and presentation, as well as its alignment with the IAC-24's motto "Responsible Space for Sustainability". The aim was to solve problems related to crops while mitigating the negative effects of climate change by combining satellite data, artificial intelligence and the expertise of agronomists and local farmers.



AIDAA is pleased to announce the current Partners of the ICAS congress (in the framework of AerospaceItaly2024), hosted by AIDAA and held in Florence on September 9-13, 2024. Join us in welcoming: CIRA (Centro Italiano Ricerche Aerospaziali) as Platinum Partner, DLR (Deutsches Zentrum für Luft- und Raumfahrt) as Gold Partner and CEAS (Council of European Aerospace Societies) as Exhibitor!

*

The A.I.D.A.A. Medals, inaugurated in 2024 by the Italian Association of Aeronautics and Astronautics (A.I.D.A.A.), stand as prestigious award celebrating remarkable engineering accomplishments within the aerospace domain. These honors pay tribute to the enduring legacies of two remarkable figures in Italian aerospace history: Gen. Prof. Luigi Broglio and Prof. Eng. Giuseppe Gabrielli.

Gen. Prof. Luigi Broglio (1911-2001) distinguished himself as an accomplished engineer and a dedicated military officer. His pioneering work in exploring rockets for space applications earned him international recognition. Notably, his collaboration with NASA on the "Nube di Sodio" research program paved the way for Italy's significant contributions to space exploration, mainly through the San Marco project.

Prof. Eng. Giuseppe Gabrielli (1903-1987), renowned for his exceptional talent and ingenuity, left an indelible mark on the Italian aerospace landscape. With over 140 aircraft projects to his credit, including the iconic G.91, Gabrielli's innovative designs and engineering prowess boosted Italy's aeronautical industry.

In honour of these distinguished figures, A.I.D.A.A. has established two prestigious medals to be awarded to outstanding individuals in the fields of astronautics and aeronautics. The Broglio Medal will be ceremonially conferred during the 75th

International Astronautical Congress (I.A.C.) in Milan. The Gabrielli Medal will be presented at the 34th International Council of the Aeronautical Sciences (I.C.A.S.) in Florence.

For those interested in participating in the nomination process for these esteemed awards, further details are available at <https://www.aidaa.it/medals>, or inquiries can be directed to awards@aidaa.it.



Prof. Eng. Giuseppe Gabrielli



Gen. Prof. Luigi Broglio



Creating a diverse workforce is crucial for excellence, as it fosters creativity and innovation, particularly in tackling science's toughest challenges. The physical sciences, including aerospace engineering, stand to gain significantly from more inclusive practices that welcome individuals from underrepresented groups such as women, racial and ethnic minorities, LGBTQIA+ individuals, people with disabilities, and others. However, these groups often face unwelcoming work environments marked by exclusion from meetings, microaggressions, limited promotion opportunities, and other discriminatory actions. These experiences, whether implicit or explicit, deter people from entering and remaining in the aerospace field.

AIP is committed to fostering a culture that embraces diversity, advances equity, and promotes inclusion across the physical sciences. As a result, we recently launched our Diversity, Equity, Inclusion, Belonging and Accessibility (DEIBA) Strategic Plan for 2024-2029.

Our DEIBA plan addresses the continued under-representation of marginalized groups in STEM. The plan represents the collective thinking of 10 Member Societies (collectively referred to as the Federation) and builds upon AIP's existing programmatic efforts to create a culture of inclusion and belonging, and to increase the visibility of the Federation as a leader of DEIBA in the physical sciences community.

We envision this plan to be a catalyst to stimulate systemic change that can be modeled globally across the physical and space sciences community. We invite you to review the plan and consider how you can contribute to its implementation within your organization. Together, we can create a more diverse, equitable, inclusive, and accessible environment in the physical sciences.

Visit AIP.org: <https://bit.ly/3W5oSde>

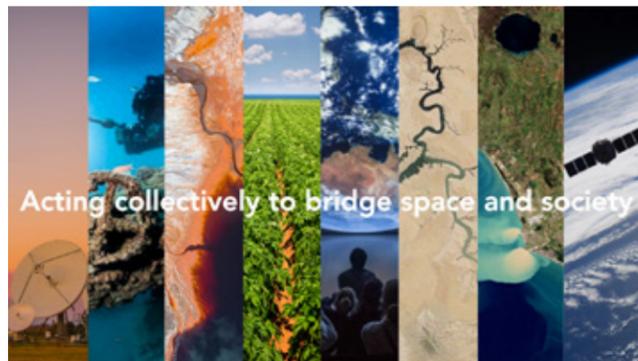


Discover Eurisy via its new initiatives bridging Space & Society. To increase student enrolment in STEM subjects, Eurisy actively contributes to the development of materials for trainers. As part of the GEO-Academy project, explore GEOOBSERVE, the new central hub for teachers to learn more about GIS, Remote Sensing and Earth Observation accessible for free from June.

A new project was kicked off in February, SpaceSUITE: it will develop tools and trainings to support the development of policy and actions for a skilled workforce in the downstream space sector.

To revamp its Space4Cities initiative, Eurisy is glad to present UDENE, a Horizon funded project aiming at providing a scenario-based platform to test and validate projections using Copernicus data, supporting urban planners and decision makers for Smart Cities development.

To celebrate the Olympic spirit, Eurisy will soon launch a new series of webinars in collaboration with the European Platform for Sport Innovation with key speakers for discussions about the use of space data and applications for the sport sector, from monitoring athletes' performances to the construction of innovative infrastructure.



Eurisy continues to organise a range of national and topical events highlighting the potential of satellite technologies. Two upcoming national workshops (Portugal in May and Bulgaria in June) on Disaster Risk Management with EUSPA and a Space for Arctic workshop with ESA in Tromsø, Norway in July.

Find out more about Eurisy initiatives on its social media and website <https://www.eurisy.eu/> and stay tuned for a new rebranded edition of the Hubert Curien Award.



Hundreds of youthful engineers, pushing the boundaries of imagination and their own limitations, entered the competition for a chance to participate in the finals of the 10th anniversary edition of the European Rover Challenge (ERC) – the world's hardest space robotics competition. **This year, 69 elite teams, ready to take on tasks that mimic NASA space missions, took on the challenge set by the European Space Foundation.** The event, a celebration of science and technology, will be held September 6-8, 2024 at the AGH University of Krakow.



"The 10th edition of the European Rover Challenge is not only the greatest event to date, but above all it is an opportunity to celebrate a decade of innovation and passion together at the official Anniversary Ceremony. This year, to celebrate the 10th anniversary of the project, we have planned a special agenda with attendance by special guests from the International Astronautical Federation, the European Space Agency (ESA) and NASA. Since 2014, a group of nearly a hundred enthusiasts, experts and scientists, supported by volunteers, have been

running this unique project, which we are proud to present to the world. In Krakow, the capital of Malopolska, which is part of the NEREUS space regions network; participants and guests will have the opportunity to experience the exceptional atmosphere and our unwavering passion that makes the European Rover Challenge more than just an event – it's the dream of reaching for the stars that becomes a reality." – concludes Łukasz Wilczyński, CEO of the European Space Foundation.

Learn more about the ERC participants: <https://roverchallenge.eu/teams/>

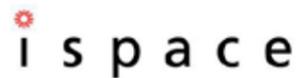


The Space Sector Forum, Poland's largest and most significant space industry conference, has been organized by the Polish Space Industry Association since 2016. Each edition of this bi-annual event attracts over 400 attendees from the Polish and European industry, government, and media. The Forum serves as a platform for exchanging experiences, showcasing Poland's recent space sector achievements, and discussing the sector's current state and future development. The key topics for the 2024 edition, the Polish Space Strategy, space security, and European cooperation, are of utmost importance and relevance to the industry.

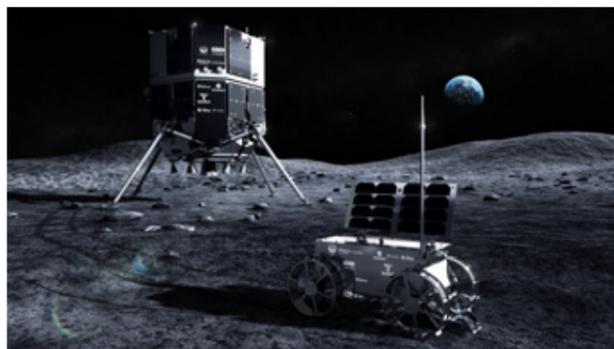


Since 2016, Forum speakers included key representatives of the European Space Agency, the European Southern Observatory, and the European Commission, as well as the Polish Space Agency, the Polish government, and key European enterprises. The Forum offers companies a unique opportunity to showcase their latest innovations and technologies. The event enhances their visibility and allows them to network with key players in the industry.

Space Sector Forum 2024 will occur on June 4th in Warsaw, Poland. The event is free, but attendees must register using a form on the organizer's website. Learn more at <https://space.biz.pl/>



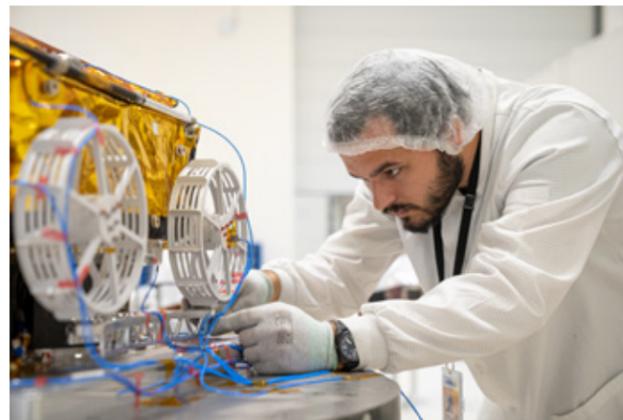
Global lunar exploration company [ispace, inc.](https://www.ispace.com) continues with preparations for its HAKUTO-R Mission 2, planned to launch in Q4 of 2024 with its in-house designed and built lunar lander and rover. Mission 2 will serve as the company's second technological demonstration, based on lessons learned from Mission 1, with the objective of further validating the lander's design and technology, as well as ispace's business model to provide reliable lunar transportation and data services. During Mission 2, ispace will conduct initial resource exploration activities, primarily with its Micro Rover that will travel to the lunar surface aboard the RESILIENCE lander for surface exploration and data collection on the Moon.



In April, ispace EUROPE, the Luxembourg-based subsidiary of ispace, inc., announced that it had reached a significant milestone by completing all environmental testing of the qualification model of its Micro Rover. Next, the Micro Rover Qualification model will be integrated on the RESILIENCE lander at the integration and test facility in Tsukuba, Japan. The flight rover is scheduled to be integrated onto the lander in the summer of 2024.

Progress also continues on the Assembly, Integration, and Testing campaign for the RESILIENCE lander itself. Important systems such as the lander's propulsion system, main body and electrical systems are being integrated by ispace engineers. The

lander will transport 5 payloads to the lunar surface, which are being loaded as lander development progresses. Once assembly work has been completed, environmental testing will take place before the lander is shipped to Florida for launch preparations.



Space for the Industry and for Students

The Hungarian Astronautical Society (MANT), a civil organization engaged with space activities, had a very busy first quarter in 2024. Among other things, we published the *Hungarian Space Kaleidoscope 2023/2024*, an up-to-date registry of stakeholders in the domestic space sector. The purpose of this booklet is to provide an insight into the diverse space activities, presenting small and medium-sized enterprises, research centers, and university departments. It is available in English as well from our web site (www.mant.hu). In March, we announced the winners of our traditional annual student competition. This year's theme was suborbital space flight, under the title *A few minutes of weightlessness*. More than 200 entries were submitted in a variety of genres, from essays to drawings, individually or in teams, by students aged 11–14 and 15–18 years. The *CanSat Hungary 2024* competition

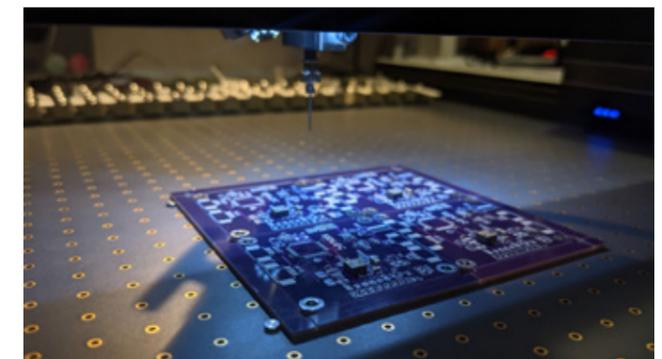
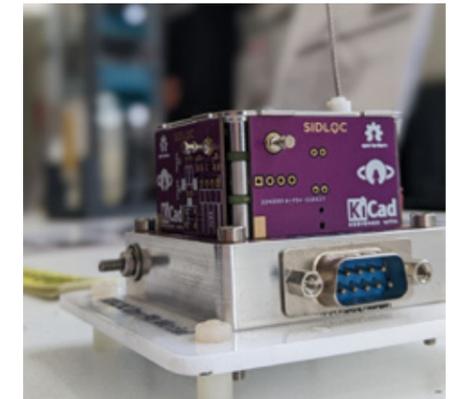
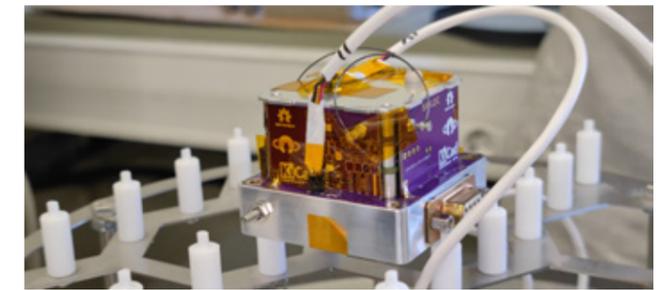
was also concluded in April, with huge success. More than 230 high-school students from 48 teams were involved. With the support of their mentors, they developed and built their own small satellite simulations for half a year, of which the top ten climbed to the height of more than 1 km on board rockets developed by university students. The launch day of the final was a spectacular event. The instruments built within the volume of a 330 ml soda can performed measurements in the air and transmitted data to ground stations via radio. The best team will be hosted by ESA at ESTEC, together with other European national winners.



SIDLOC

SIDLOC is an ESA-funded project, an ARTES activity developed by the Libre Space Foundation and FORTH. Its aim is to develop a proposed standard for satellite identification and localization. This multifaceted project aspires to become a useful tool for space traffic management and space situational awareness.

As the situation in space becomes all the more overwhelming, the need arises for identifying and tracking tightly packed constellations, providing accurate orbital prediction and collision-avoidance algorithms, and providing next-generation identification services while taking into consideration the drastic changes that are occurring. This is, in a nutshell, what SIDLOC aspires to do; it aims to provide a space identification and localization system that is easy to integrate even in a ¼ U or PQ satellite and has minimal integration requirements. SIDLOC has undergone the bake-out and functional testing with success, and it is scheduled to fly onboard Ariane 6. This will be SIDLOC's first testing in space, and during its journey, a series of tests will be performed. Stay tuned for more updates...





GRACE project: Successful tests of the bipropellant rocket engine

The Łukasiewicz – Institute of Aviation have completed a series of tests of the engine that belongs to the category of the largest subsystems in satellite propulsion. The development of this engine is carried out as part of the GRACE project (ESA).

The engine uses several unique technologies developed by the Institute and with the participation of industrial partners. These refer to material technologies (including a composition of materials capable of continuous operation at a temperature of 1500°C), as well as a globally unique catalyst for the decomposition of highly concentrated hydrogen peroxide, allowing long-term operation at temperatures up to 950°C and in an oxidizing environment. Steady-state engine operation and performance have been confirmed during the completed test campaign.

“We are currently at the stage of verifying the engine engineering model. We have conducted experiments on ground. However, the engine itself is designed to operate in a very demanding space environment. The next step will be to prepare a flight-like engine and further verification tests”, said Dr. Eng. Paweł Surmacz.

The project is consistent with the modern trend of sustainable propulsion solutions using non-toxic, so-called green propellants, including highly concentrated hydrogen peroxide (98%), the production technology of which was also developed by the Institute.

The engine can be used both in future space platforms performing demanding service missions, as well as in the last stages of small launch vehicles (kick-stage). Łukasiewicz – Institute of Aviation is also gradually developing other propulsion solutions that can be used by spacecraft, designed for regular in-orbit service missions.



NanoAvionics, a leading small satellite manufacturer, is excited to announce the launch of its advanced standardized nano and micro satellite platforms. The company continuously pushes the boundaries to enhance accessibility and efficiency in the space sector. NanoAvionics' latest platforms are meticulously designed to support diverse industries in achieving their space-based objectives with cost-effectiveness and quicker timelines.

NanoAvionics invites industry professionals and enthusiasts to join an online product launch event where it will delve into the evolution from NewSpace 2.0 to NewSpace 3.0. The session will focus on the pivotal roles of standardization and reliability assurance in the ongoing development of the space economy. As a pioneering manufacturer, NanoAvionics stands at the forefront of these discussions, offering valuable insights into how new standards are shaping the future of satellite missions.



The event will provide participants with an opportunity to engage with NanoAvionics' experts and learn how the company's innovative satellite solutions are tailored to meet the evolving needs of today's space missions. Attendees will discover how these developments can empower their projects and expand the potential of space-based applications. Register here: [Event](#)



The National Space Science Agency (NSSA) has recently signed an MoU with the National Space Science and Technology Center (NSSTC) in UAE to further its collaboration in various fields. The NSSA also extended its collaboration with

MBRSC and the Egyptian Space Agency in various collaborative projects. NSSA's scientists conducted several technical visits to the three entities.



The NSSA has also participated in many events such as the 45th Meeting of the Technical Committee of the Telecommunications Technical Office in the GCC Countries, the Global Government Summit held in Dubai, Utilizing Earth Observation Data for Applications in Agriculture and Environment Workshop, and the General Assembly's Data Analytics Cohort.



A member of the agency, Ms. Shaima Al-Meer, senior space data analyst, was selected by the International Group for Artificial Intelligence (IGOAI) as the National Artificial Intelligence Advisor for the “Women in Artificial Intelligence - Kingdom of Bahrain”.



NSSA's Eng. Ali Al-Qaraan won the best National Points of Contact (NPoC) 2023 award for the Middle East region by the Space Generations Advisory Council (SGAC) in March 2024 making him the first Bahraini to receive this award.



Ms. Roaya Bubshait, head of geospatial analytics, participated as a speaker in the SPACetalks 4.0 conference held in the European Space Agency Convention Centre, in UK. Also, she presented a scientific paper in the Open Innovation and Digital Transformation Conference held in Bahrain. NSSA members published 4 research papers so far this year with more to publish in the coming months.



the International Astronautical Congress (IAC) 2024, where we eagerly anticipate engaging with fellow space enthusiasts, sharing ideas, and showcasing our latest advancements in space exploration. As active members of the global space community, we eagerly look forward to contributing to the dynamic discussions and collaborations that define this prestigious event.

Looking ahead, we are proud to announce our intention to host the 7th IAC in 2027 in Islamabad, Pakistan. With our dedication to excellence and innovation, supported by our state-of-the-art facilities and strategic location, we are prepared to host an unforgettable congress that will bring together leading minds from around the world to explore the frontiers of space exploration.

Our SNS NUST Astronomy Lab, known as the NUST Astronomical Observatory (NAO), serves as a cornerstone resource for students enrolled in the BS Physics program. Equipped with an 11-inch telescope, the observatory provides hands-on experience in astrophotography and valuable observational techniques such as spectroscopy and photometry. Recently upgraded with a radio astronomy setup, the lab now collects data on space debris, comets, and asteroids in collaboration with the Russian Academy of Sciences (RAS). Additionally, we plan to enhance our observational capabilities by introducing a 16-inch telescope, offering students unprecedented opportunities to contribute meaningfully to the global scientific community.

Moreover, NUST boasts two highly active astronomy societies: The NUST Physics and Astronomy Society (NPAS) and Workshops on Astronomy, Astrophotography, and Telescopes (WATA). These dynamic platforms foster student engagement, organize events, and cultivate a passionate community in astronomy and astrophysics. Through lectures, workshops, and stargazing sessions, NPAS and WATA enrich students' understanding of the cosmos and play a crucial role in promoting academic excellence in these fields.



Our Current Telescope

NUST an Internationally Emerging Institute in Astronomy, Astrophysics and Theoretical Physics

In the fields of astronomy, astrophysics, and theoretical physics, the National University of Sciences and Technology (NUST), School of Natural Sciences (SNS), stands as an emerging leader in global academia. Through pioneering research initiatives and scholarly endeavors, SNS, NUST has established itself as a prominent institution, both domestically and internationally.

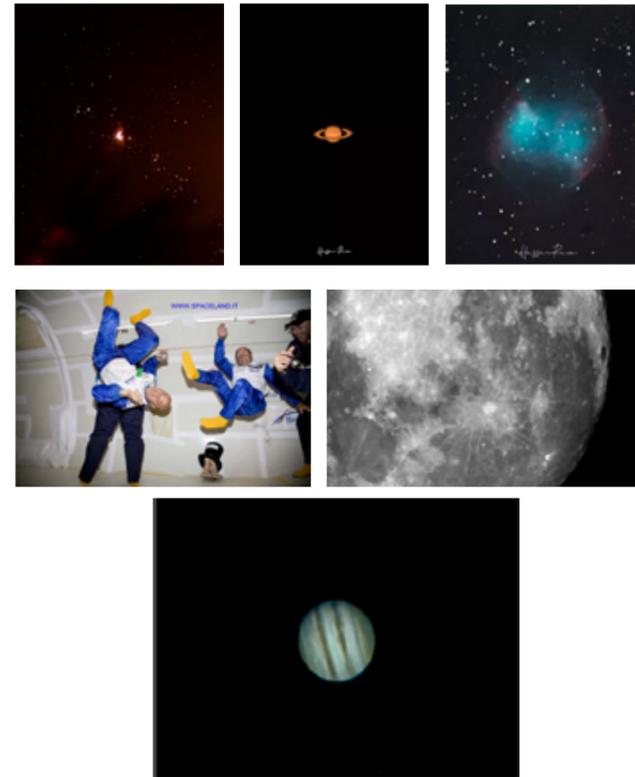
Highlights of our current and future plans in the field of Astronomy and Astrophysics

We are excited to announce our upcoming participation in



Furthermore, our ongoing research in astrophysics and theoretical physics remains dedicated to pushing the boundaries of knowledge and innovation. From probing the mysteries of the cosmos to unraveling the fundamental laws of the universe, our team of researchers is steadfast in advancing our understanding of the cosmos and shaping the future of space exploration. We eagerly anticipate sharing our latest findings, insights, and collaborations with the global space community at IAC 2024 and beyond as we continue to inspire, innovate, and explore the vast expanse of the universe.

Astrophotographs by Students taken from NAO, SNS, NUST H12 Campus



The 6th Summit for Space Sustainability

The 6th Summit for Space Sustainability is a high-level, multi-day policy forum designed to highlight opportunities and challenges for developing solutions for space sustainability. This year, it will be held from July 11-12 in Tokyo, co-hosted by the Secure World Foundation and the Cabinet Office, Space Policy Secretariat, Government of Japan.



Join hundreds of global experts and stakeholders from industry, governments, and civil society to participate in keynotes, interactive sessions, panels, and networking.

With a special focus on the Asia-Pacific region, key themes include:

- Active debris removal progress and challenges
- Space situational awareness initiatives
- Commercial space industry's role in space sustainability
- The intersection of civil, security, and commercial space
- Space sustainability in the exploration context



SpaceLand and La Sapienza: Pioneering Asteroid-Based Space Habitats for Humanity's Expansion into the Solar System While Safeguarding Life on Earth.

Space poses formidable challenges, including radiation risks for astronauts and potential catastrophic impacts of asteroids flying toward our planet. Cosmic events like solar flares, coronal mass ejections, gamma-ray bursts and other cosmic rays can pose significant health risks to astronauts and space tourists, as these events can lead to exposure to high levels of ionizing radiation, which can exceed recommended limits and potentially cause acute and long-term health effects. EuroMir 95's experiments for ESA in the 1990s, coordinated by Doct. Carlo Viberti (proposed by U.S.-Russian MIR Corp. in 2000 as history-first private cosmonaut-engineer and now chairing the SpaceLand group), well documented such risks - e.g. one bit of memory in computerized systems on the MIR Space Station was lost every 16 hours on average due to impact by solar wind particles and higher-energy cosmic rays. Moreover, as well known, Space is dangerous also insofar as Earth-approaching asteroids, like the 2029 Apophis encounter, pose additional threats to humanity as a whole, also without actually

flying outside our atmosphere. To address these challenges, SpaceLand is starting a comprehensive collaboration with La Sapienza University of Rome, Italy, in a groundbreaking integrated test program. This joint effort with the team led by prof. Daniele Fargion involves a series of microgravity test flights aboard a modified Boeing 757-0G to be provided by the SpaceLand OG-L consortium creating the world's longest weightless laboratory: up to 50 scientists, technology innovators and students will participate in these flights for a test program really at the edge of Space knowledge.

By utilizing robotic engines to alter an asteroid's trajectory thanks to ad-hoc dynamics, SpaceLand and La Sapienza also aim to pave the way for safer planetary exploration while deviating risky asteroids such as 2029 Apophis. Such a groundbreaking endeavor will bring SpaceLand and La Sapienza to develop technologies to transform asteroids into natural spacecrafts, eliminating the need for heavy oxidizers and fuels launched from Earth. How? By ingeniously creating artificial caves within these celestial bodies, which means generating the necessary mass for on-site thrust while digging shelters which will also serve as radiation-proof cockpits for astronauts embarking on long-term flight missions to Mars and beyond.

The SpaceLand open-door Mars Habitat, being developed in Mauritius in collaboration with Politecnico Torino and based on Architect Celeste Petraroli's novel design, will play a pivotal role in this vision: while demonstrating novel construction methods and ISRU tools for fast-building human outposts on the Red Planet, it will also host all needed Research and Development (R&D) and Assembly, Integration and pre-flight Test (AIT) laboratories and tools to prepare people and payloads for such microgravity test flights with a threefold objective: driving the evolution of crewed space exploration, making asteroid-based spacecrafts a reality and democratizing people's access to Space.



See you at IAC 2025 in Sydney

Space Industry Association of Australia (SIAA) welcomes the global space community to Sydney, Australia for the 76th International Astronautical Congress (IAC) from 29 September to 3 October 2025.

IAC 2025, hosted by SIAA and co-hosted by Australian Space Agency and NSW Government, will showcase the entire Indo-Pacific region and highlight adjacent industry such as: resources; construction; manufacturing; health; Smart Cities; utilities; telecommunications; agriculture; finance; and emergency services.

The theme of IAC 2025 is 'Sustainable Space : Resilient Earth', setting the stage for important discussions such as: space-based application for earth; sustainable space activities; and sustaining life off earth.



With its rich history of space exploration and environmental advantage, Australia is the perfect place to explore the next phase of growth in the global space sector. Australia has over 600 organizations operating in the space sector and our space capability spans the entire space supply chain from end-to-end. Together with our Indo-Pacific region and country partners, we are home to extraordinary opportunity for space.

Sydney enjoys a reputation as one of the safest cities in the world and is the fourth most livable city (EIU's Global Livability Index 2023). Cosmopolitan Sydney is set on one of the world's most beautiful harbours complete with the Opera House and Sydney Harbour Bridge, and a wealth of beaches, museums, galleries, nature, and wildlife. IAC 2025 delegates and accompanying persons and their children will leave Sydney with memories that will last a lifetime.

Register your interest at iac2025.org



SPACETIDE 2024 Conference is around the corner!



SPACETIDE Foundation is a Tokyo-based organisation founded in 2015. Our activities can be divided into three main goals: 'connect' diverse actors across many industries and between the public and private sectors; 'solve' problems faced by the space industry; and 'create' new business opportunities.

[Connect]

We have organised the leading commercial space conference in APAC annually since 2015, attracting many participants from a diverse range of industries and backgrounds. New-to-space industries make up almost half of the attendees!

In that spirit, this year's conference theme is: 'From APAC to the World: Uniting Diverse Communities.' [Join us in Tokyo on July 8-10, 2024!](http://www.spacetide.org)

[Solve]

We publish a semi-annual survey report, "COMPASS", on the progress of space business in the APAC region. It has received accolades in many media and government reports.

In addition, Space Industry Federation for APAC (SIFA) is an initiative launched by SPACETIDE to maintain regular dialogues among participants from over ten APAC countries, [articulate the common challenges](#) faced across the region and formulate policy recommendations and actions to alleviate those challenges.

[Create]

To create internationally competitive space start-ups, SPACETIDE is offering Japan's first acceleration programme for start-ups specialising in the space sector since 2022. We also partner with the S-Booster space idea contest to bring about the next generation space industry visionaries.

We finally connect space companies with other industries all year round through workshops and thematic events.

Through these activities, we orchestrate an ecosystem for the APAC space industry!



Singapore Space and Technology Limited hosts the annual Global Space and Technology Convention (GSTC) every February to foster the growth of the regional space industry and connect the global space community. In partnership with Singapore's national space office, the Office for Space Technology & Industry (OSTIn), GSTC helps strengthen Singapore's position as a leading global space hub.



Mr. Jeremy Chan, Chairman of Singapore Space and Technology Limited hands a token of appreciation to Prof. Anu Ojha OBE, Director of Championing Space at the UK Space Agency, at GSTC 2024.

For the second consecutive year, the United Kingdom was the featured country at the Convention. This highlighted the

Convention's potential to encourage more UK-Singapore collaborations and for UK space companies to expand their businesses.



Innovation Workshop at GSTC 24.

Various co-located events are featured annually, and this year was no exception. The ONR Global Landscape Workshop, Singapore Land Authority Seminar, and STEM 2.0 Education Forum were just a few of the notable events that took place. Additionally, the Japan Aerospace Exploration Agency and Singapore Space and Technology Limited co-organised an Innovation Workshop supported by OSTIn, which brought together Japanese and Singaporean space companies and investors to discuss innovation and forging partnerships between both nations. GSTC also runs its sideline events, including the inaugural Global B2B Marketplace and a Masterclass on Space Data & Financial Innovation.



MOU signing between Arkadiah Technology and the Centre for Remote Imaging, Sensing and Processing.



Industry leaders shared insights during the Regional Space Agency Dialogue at GSTC 24.

This GSTC, OSTIn witnessed Arkadiah Technology and the Centre for Remote Imaging, Sensing and Processing (CRISP) sign an MOU to further their groundbreaking research on enhanced carbon estimation.

Distinguished speakers from across the globe drive inspiring conversations on various facets at GSTC. The Convention is a premier platform connecting worldwide space professionals, government officials, and academia with the burgeoning space industry in Asia.

To attend the 17th edition of GSTC, please register your interest at <https://www.space.org.sg/gstc/#interested>.



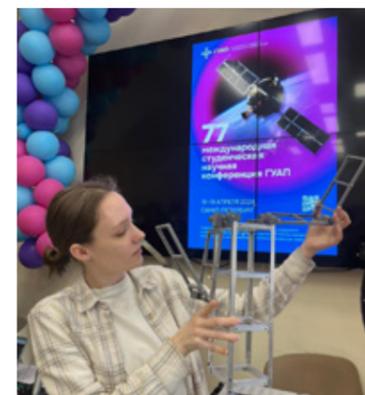
International Conference on Aerospace Instrumentation and Operational Technologies

St. Petersburg State University of Aerospace Instrumentation (SUAI) hosted the V International Conference on Aerospace Instrumentation and Operational Technologies

In 2024, the Conference included 12 events dedicated to the industry issues. Scientists, graduate students, and students had the opportunity to exchange information and research results in the field of aerospace instrumentation, operational technologies, and transport process technologies.

The five sections of the Conference were devoted to current research in the field of aerospace measurement and computing systems, intelligent transport systems, system analysis and logistics, operation and control of aerospace systems, as well as aerospace computer and software systems. A new section dedicated to aerospace history was introduced this year. The issues of the history of aviation and cosmonautics, the evolution of scientific research, the history of the development of models and techniques in aviation and cosmonautics were discussed. The section was created as a result of joint work of SUAI and the Aviation and Cosmonautics History Section of the St. Petersburg Branch of the Russian National Committee for the History and Philosophy of Science and Technology of the Russian Academy of Sciences (RAS).

Within the framework of the plenary session, scientists, representatives of the teaching staff of universities, heads and engineers of specialized companies presented their reports.



Government of Pakistan Approves National Space Policy

The Government of Pakistan approved the National Space Policy in December 2023, serving as a strategic roadmap for the National Space Program. It emphasizes utilizing space technology for socio-economic development and national security, promoting

international cooperation, and adhering to global standards. The policy sets objectives for collaboration between public and private sectors, focusing on sustainable development, industry growth, and international partnerships.

Eight key thrust areas are outlined: legal frameworks, space technology applications, infrastructure, research and development, local industry growth and commercialization, space education and awareness, international partnerships, and space resource management. Guidelines include defining SUPARCO's role, integrating space tech into sectors, financial support, capacity building, mandatory satellite use, and promoting space tech's economic applications. The policy also offers incentives for industry growth, technology innovation, and sustainable space resource use.

The policy emphasizes the versatile applications of space technology across various economic sectors and commits to the sustainable utilization of outer space resources. It also underscores government incentives for industry growth, technology development, and innovation, highlighting a comprehensive framework for advancing Pakistan's space sector while ensuring responsible space resource use and measures against space debris.

The policy can be accessed at: www.suparco.gov.pk/wp-content/uploads/2024/01/National-Space-Policy.pdf





PolyU - the First University in Hong Kong as an IAF member, Pioneering the Application of Astronautical Technology in Emerging Fields

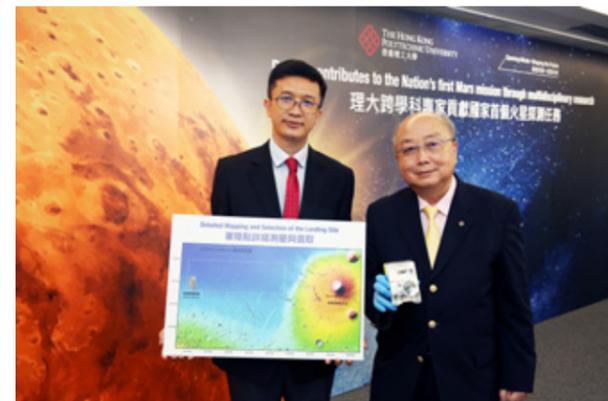
The Hong Kong Polytechnic University (PolyU) became a member of the International Astronautical Federation (IAF), making it the first educational institution in Hong Kong to join the IAF.

The PolyU research team, led by Prof. Yung Kai Leung, Chair Professor of Precision Engineering, designed and manufactured the "Surface Sampling and Packing System", a sophisticated and high-temperature resisted invention that uses robotics for lunar sample acquisition. The team's innovation was also demonstrated in developing the Camera Pointing System for Chang'e-4 lunar landing mission, which assisted in the capturing of images around the lander, giving a 360-degree view of the lunar farside and the movement of the lunar rover.

Since 2010, PolyU has participated in the Nation's space exploration programmes and collaborating with the China Academy of Space Technology to develop and manufacture sophisticated space instruments. PolyU researchers have also used advanced topographic mapping technologies to evaluate and identify the best landing sites for spacecraft. These contributions supported the success of the Nation's lunar exploration missions, including Chang'e-3, Chang'e-4 and Chang'e-5, and the Mars exploration project Tianwen-1.

Recently, PolyU has formed a partnership with the Hong Kong Aerospace Technology Group to explore collaboration opportunities in satellite navigation and communication, satellite remote sensing, and payload development.

Additionally, PolyU researchers will explore using the Golden Bauhinia Constellation low-orbit satellites to enhance navigation services and carry developed navigation payloads in future low-orbit satellites.



Embark on an Unforgettable Space Exploration Journey

Are you ready to delve into the thrilling world of space architecture and extraterrestrial habitation? Join us for an extraordinary learning journey with TU Wien Academy, hosted at the University of Houston's SICSA campus from September 18 - 26, 2024.

This immersive experience promises to catapult you into the future of space exploration. Through a rich tapestry of lectures, workshops, and company visits, you'll explore the interdisciplinary realm of Space Architecture and Habitat Design. Engage with global experts, dive into real-world space projects, and unlock the secrets of designing for extreme environments. Highlights of the journey include exclusive excursions to NASA, the Lunar Planetary Institute, and Space Center Houston. Gain unprecedented access to leading space research facilities, interact with industry professionals, and draw inspiration from the historic Apollo missions.

Under the guidance of esteemed instructors, you'll expand your knowledge and hone your skills in space architecture, design, engineering, and technology.

Why join? This experience offers exclusive access to top-tier institutions and experts, personalized interactions with academics and professionals, hands-on site visits, collaboration opportunities, and career advancement in an exhilarating field. Your benefits extend beyond knowledge acquisition to encompass collaboration, comprehensive learning, and personal and professional growth. Take the plunge into the cosmos and pave the way for your future in space exploration and architecture.

>> Limited places. Secure a remaining place now: <https://www.tuwien.at/index.php?id=102690>



Fostering Innovation in Space Technology: CubeSat Development in Sharjah – the United Arab Emirates

At the University of Sharjah, the Sharjah Academy for Astronomy, Space Sciences, and Technology (SAASST) stands as a pioneering institution in the United Arab Emirates, spearheading advancements in the fields of astronomy and space sciences education and research. At the core of its mission is cultivating expertise in satellite technology, with a particular focus on CubeSat development.

The SAASST CubeSat program serves as a nexus, combining scientific theory with hands-on experience to foster a comprehensive understanding of space technology, enriching the University's educational scope and amplifying the role of the Emirate of Sharjah and the UAE within the space sector and space-based economy. A standout illustration is the student-faculty engineered Sharjah-Sat-1, resulting from collaboration between SAASST, Istanbul Technical University, and Sabanci University. This initiative afforded students an invaluable opportunity to design, test, and manage small-scale satellites. Its subsequent iteration, Sharjah-Sat-2, represents a sophisticated Earth observation satellite, offering high-resolution terrestrial imagery to aid in environmental surveillance, urban planning, and crisis management. Supported by Sharjah's local entities, it facilitates more effective resource management and policymaking.

The SAASST CubeSat program embodies a strategic initiative designed to develop expertise in space technology among students and educators, aligning with the UAE's vision of a knowledge-based economy fueled by technological innovation. By engaging students in innovative projects, SAASST not only imparts crucial technical skills but also fosters the emergence of future leaders in space exploration.



Testing Sharjah-Sat-1.



In Memoriam Eveline Gottzein – a Pioneer for Women in Aerospace

Eveline Gottzein was fascinated by challenging control systems in aerospace for satellites and rockets. Together with her teams she elaborated groundbreaking solutions and provided a role model for women in engineering honored by many awards at highest level. She passed away on 24.12.2023 near Munich.

Eveline Gottzein was born 1931 in Leipzig. Located in Eastern Germany, it was difficult to pursue her professional visions in science and technology. Thus 1957 left for Western Germany and worked since 1959 she for the company Bölkow AG (later part of Airbus), where the challenging and motivating tasks in the emerging aerospace sector attracted her interest. At age of 32 she was appointed head of the vehicle control department. Based on excellent engineering skills, vigor, and diligence she demonstrated, what woman can achieve in engineering. Thus she became a paragon for the next generation of female engineers.

Her team achieved a technology breakthrough by realizing the innovative 3-axes attitude control system, which became the worldwide standard, replacing the spin-stabilized principles used before. But also control challenges of magnetic levitation trains were addressed by her team, leading 1987 to the world speed record for trains.



IAF Members' Corner

Even after formal retirement 1990 she initiated innovative use of GPS receivers for navigation of geostationary satellites. She also followed the recent "New Space" developments and enjoyed the new role of her early dynamic simulators in the context of satellite formations. On this topic she still contributed a paper to the IAC 2023.

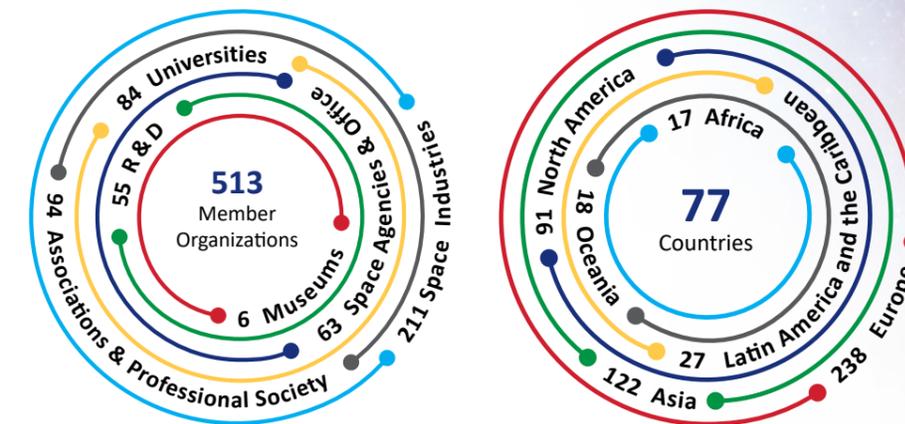
Eveline Gottzein was characterized by her collaborators as a realistic visionary. She had the ability to inspire young people for her space visions and transferred her experience as well as her fascination in the space technology programs at University Würzburg to motivated students.

In recognition of her outstanding achievements in science and technology, but also her inspiring leadership capabilities and her pioneering role for female engineers, she was selected for highest awards: 1993 Werner-von-Siemens-Ring, 1996 Bavarian Medal of Merit, 1998 Maximilians-Medal, 2000 Order of Merit of the Federal Republic of Germany, 2007 AIAA Fellow, 2008 IFAC Fellow.



INTERNATIONAL ASTRONAUTICAL FEDERATION

Join the world's leading space advocacy body!



OUR BENEFITS

NETWORKING

- Access a global network of potential business partners and meet decision makers
- Promote your organization to the workforce of tomorrow
- Attract and exchange with students and young professionals at our targeted events
- Interact with your peers in exclusive IAF members lounges
- Shape the space community by nominating an IAF Bureau Member

- Promote your organization on the IAF website, social media and the IAFastro app
- Reach more than 35.000 subscribers worldwide through the IAF Newsletter and Members' Corner
- Gain visibility for your organization through the IAF publications
- Be included in all IAF promotional materials

VISIBILITY

RECOGNITION

- Earn public recognition of your organization's achievements
- Nominate candidates and be nominated for the IAF Awards
- Access IAF events through IAF Grants Programmes
- Get privileged connection with IAF's media partners
- Boost your organization's awareness through IAF Plenary Programmes

- Get discounted rates on registration and exhibition fees
- Receive free access to more than 50.000 manuscripts through the IAF Digital Library
- Book complimentary meeting facilities during IAF events
- Have privileged access to sponsorship opportunities at IAF events

FINANCIAL BENEFITS

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Download the **Application Form** on our website www.iafastro.org and contact membership@iafastro.org

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