Beyond Exploration 2026

23/24/25 September

Legend

- Agriculture & Food
- Beyond Tech Communication
- Cross-Cutting Events
- Emerging Professions
- Entrepreneurship, Economy & Finance
- Industrial Diversification and Transition to the Space Sector
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- Opening Event
- Resources Exploitation and Sustainability
- Space Laws
- Space Physiology, Healthcare, Wellness, Pharmacy
- Space Sciences & Earth Applications
- Tech Fashion & Textile
- Unmanned Operations – Human and Autonomous Exploration

Wednesday 23 September
10:30 - 11:45

Exploration Arena, Hall C1

Space Sciences & Earth Applications
Click here

Beyond the Lab: Space It Up! and the new perspectives of the Italian space industry

Organized by: SCARL Space It Up!

Language: English

Over the past few years, the European space sector has entered a new phase of acceleration, shaped by the need to strengthen Europe's strategic role in space and reinforce its technological autonomy. Within this evolving landscape, Italy stands out for its combination of scientific excellence, industrial capability and institutional vision, supported by national strategies aimed at consolidating the country's position in the global space economy.

In this context, the National Recovery and Resilience Plan (PNRR) has provided a significant boost to Italy's space ambitions, enabling advanced initiatives such as **Space It Up!**, the programme funded by the Italian Space Agency (ASI) and the Ministry of University and Research (MUR). Bringing together universities, research centres, companies and institutions, Space It Up! was created to overcome the fragmentation of Italian space research and build a shared framework where knowledge, technologies and expertise can converge to generate value for the national ecosystem.

Two years after the start of the programme, this panel will move beyond a presentation of results to open a broader discussion on the impact Space It Up! is generating across the Italian space sector.

Together with experts who have directly contributed to the programme's development, the discussion will explore the milestones achieved so far, the collaborations enabled by the programme, the role of knowledge transfer between research and industry, and the challenges shaping the path ahead.

Through the lens of Space It Up!, the panel will offer a concrete perspective on how research, industry and institutions can work together to strengthen Italy's role in the space sector.

Programme

Moderator:
Margherita Righini, Hub Space It Up!

Erasmo Carrera, Space It Up!, Politecnico di Torino

Nunzia Favaloro, CIRA - Italian Aerospace Research Center

Alfredo Renga, University of Naples Federico II

Fabrizia Buongiorno, National Institute of Geophysics and Volcanology - INGV

Maria Cristina Lupi, Leonardo S.p.A.

Gilles Mariotti, SITAEL S.p.A.

Kamel Besbes, University of Monastir, CRMN Sousse

Wednesday 23 September
14:30 - 16:00

Main Stage, Hall C1

Opening Event
Click here

BEX Vision Summit. Where Space Meets Industry

Organized by: BEX – Beyond Exploration Expo

Language: English

BEX – Beyond Exploration Expo is the first exhibition and conference platform in Italy fully dedicated to the space economy, designed to connect the space industry with high-potential terrestrial sectors.
The opening session plays a key strategic role in defining a clear and distinctive positioning, placing the LEO economy at the center as the main competitive arena in the transition to the post-ISS era.
In this context, it is essential to adopt a realistic narrative: while the lunar challenge remains primarily geopolitical and long-term, concrete industrial opportunities are already developing in low Earth orbit.
LEO is where real business models are emerging, accessible not only to traditional space players but also to SMEs and non-space supply chains, strengthening Italy's role through existing industrial collaborations.
BEX aims to be a platform where strategic vision, regulatory frameworks, and industrial applications converge, fostering stronger integration between space and terrestrial industries and reinforcing Europe's position in the global space economy.

Wednesday 23 September
16:00 - 17:30

Decortech Conference Arena, Hall B5-D5

Cross-Cutting Events
Click here

Advanced ceramics: a materials platform for next generation aerospace and beyond

Organized by: Institute of Science, Technology and Sustainability for the Development of Ceramic Materials (ISSMC) of the National Research Council (CNR), in collaboration with TECNA

Language: English

To what extent might the advanced ceramics and their composite variants emerge as game-changing leaders in next-generation aerospace extreme-environment technologies and beyond? This contribution is meant to introduce a non-professional audience to some of the current frontier topics on advanced ceramics manufactured as bulk or composite, for aerospace and beyond. It is expected that the potential of advanced ceramics for extreme-environment technologies can be unlocked by leveraging their favorable property combination of exceptional thermophysical properties like high melting point, lightness and strong resistance to chemical degradation and oxidation under extreme conditions.
To refer to something that is widely talked about today, speed is the name of the game when it comes to modern aerospace priorities. Aerospace engineers have long sought materials able to thrive where airflow becomes plasma and oxidation accelerates beyond intuition. Governments around the world are investing "mountains of money" to develop components capable of enabling airborne vehicles to travel fast worldwide. While such ambition has been a nebulous dream for decades, recent advancements in ultra-high temperature ceramic matrix composites bring that dream closer to reality.

Programme

Frédéric Tullio Monteverde, Institute of Science, Technology and Sustainability for the Development of Ceramic Materials - CNR-ISSMC

Alessandro Airoldi, Politecnico di Milano

Mario De Stefano Fumo, CIRA - Italian Aerospace Research Center

Massimiliano Valle, Petroceramics

Wednesday 23 September
16:00 - 17:30

Exploration Arena, Hall C1

Resources Exploitation and Sustainability
Click here

Large Constellations: New Opportunities and Challenges for Sustainability and Space Traffic Management

Organized by: Politecnico di Milano - Department of Aerospace Science and Technology

Language: English

Space assets provide services that deliver significant social and economic benefits to humankind while enabling the monitoring of our planet's condition. As our lives become increasingly interconnected through satellite-enabled services and access to space becomes easier, outer space can be regarded as an extension of Earth's biosphere. In this context, the long-term sustainability of space activities will only be achievable if spacefaring nations adopt a change in behavior and embrace responsible stewardship of the space environment.

Large satellite constellations are creating new opportunities and services, including global broadband internet access and seamless connectivity worldwide. At the same time, however, the number of objects orbiting Earth is growing exponentially, following a trend that resembles many of the environmental pressures observed in Earth's natural systems.

This rapid increase in orbital objects demands more rigorous approaches to Space Traffic Management and the establishment of stronger mitigation measures to reduce the risk of collisions and preserve the long-term usability of space as a global commons.

This panel will explore the opportunities and challenges for space sustainability and space traffic management arising from the deployment of large satellite constellations. Together with representatives of major satellite operators, we will discuss recent advances in operational practices for space traffic coordination, particularly for large constellations, as well as the new Space Traffic Management infrastructure supported by the Italian Space Agency and the technical mitigation requirements introduced through the Italian Space Law.

The discussion will also address emerging challenges in Space Situational Awareness and the broader governance frameworks needed to ensure the long-term sustainability of space activities.

Programme

Moderator:
Prof.ssa Camilla Colombo, Department of Aerospace Science and Technology, Politecnico di Milano

Ashutosh Pandey, VP Group Quality Eutelsat

Germano Bianchi, Telecommunication engineer INAF

Lieutenant Colonel Giuseppe Pariti, CSSA-COA (Space Situational Awareness Centre), Aerospace Operations Command, Poggio Renatico (Ferrara)

Luca Spazzacampagna, System Engineer Telespazio *

ASI - Italian Space Agency *

Amazon LEO *

IRIS 2 *

** Speaker participation subject to confirmation*

Wednesday 23 September
16:00 - 16:45

Diotallevi 2 Room, South Hall

Unmanned Operations – Human and Autonomous Exploration
Click here

Debate: Regulatory Developments and Potential Operational and Training Impacts in the Drone Sector

Organized by: Drone and Advanced Air Mobility Observatory (Politecnico di Milano), ENAC - Italian Civil Aviation Authority

Language: English

Discussion on regulatory frameworks and the distinctions between autonomous and automated systems, offering a strategic perspective on medium- and long-term developments and their implications, starting from the training of crews and personnel involved in mission management.

Wednesday 23 September
16:30 - 17:15

Main Stage, Hall C1

Cross-Cutting Events
Click here

Non-Space Companies and the LEO Economy: Making Business with Microgravity

Organized by: ESA BSGN Agrifood accelerator manager

Language: English

This panel will explore how non-space companies can access and leverage microgravity environments to develop innovative products, processes and services. Representatives from ESA, ASI, industry and Commercial Service Providers will present concrete opportunities enabled by the programmes made available by the European Space Agency and the Italian Space Agency.
The discussion will highlight the main benefits of microgravity for research and commercial applications, including accelerated R&D cycles, novel material properties, and unique biological processes. Practical aspects such as access conditions and support mechanisms will be addressed, alongside real use cases and emerging business models. Particular attention will be given to high-potential sectors such as agrifood, advanced materials, and life sciences, showcasing how companies can translate microgravity-based experimentation into viable market opportunities on Earth and in orbit.

Programme

Moderator:
Stefano Carosio, STAM S.r.l., Business in Space Growth Network Agrifood Accelerator Manager

Francesco Liucci, European Space Agency - ESA

Micol Bellucci, Italian Space Agency - ASI

Laura Ferrero, Aerospace Logistics Technology Engineering Company - ALTEC Space

Speaker tbc, Kayser Italia *

Alessandro Pantano, Confagricoltura

** Speaker participation subject to confirmation*

Thursday 24 September
10:00 - 11:00

Exploration Arena, Hall C1

Agriculture & Food
Click here

Space and Urban Farming: Growing Life Beyond Earth, Innovating for Our Planet

Organized by: ENEA - National Agency for New Technologies, Energy and Sustainable Economic Development

Language: English

Significant know-how has already been developed by academia and industry in the field of controlled environment agriculture, soilless cultivation systems, and space farming technologies. The round table aims to highlight the current state of the art in research and technological development for food production in extreme, isolated, and resource-constrained environments, together with the related innovation and investment opportunities for terrestrial applications both in space and on Earth.
The round table will focus on the prospects and challenges of advanced cultivation systems designed to ensure food autonomy, resource efficiency, and psycho-physical well-being in remote and confined environments, The event will include a focus on the experiences developed at Concordia Station in Antarctica, recognised by ESA as one of the closest terrestrial analogues to long-duration human missions in isolated environments.
Technologies such as hydroponics, aeroponics, vertical farming, and fully controlled environment agriculture are increasingly demonstrating their strategic value for producing fresh food while minimising water, nutrient, energy, and land consumption. These systems have important applications for climate-resilient agriculture, urban and peri-urban farming, remote infrastructures, and future exploration scenarios.
Despite major advances in research and industrial development, transforming these technologies into autonomous, scalable, and highly reliable systems for long-duration operations in isolated environments remains a significant challenge. In this context, Concordia Station represents a unique international testbed for validating closed-loop cultivation systems, resource recovery strategies, crew well-being approaches, and sustainable food production technologies under extreme environmental conditions.
The round table will explore how soilless cultivation, biofortified crops, circular resource-management technologies, and controlled environment agriculture can contribute both to supporting human life in space habitats and isolated environment and to generating valuable innovations for sustainable agriculture on Earth.
The session will feature a live connection with Concordia Station in Antarctica, offering a real-time perspective from one of the world's most extreme and isolated research environments.

Programme

Chair:
Silvia Massa, National Agency for New Technologies, Energy and Sustainable Economic Development - ENEA-SSPT-AGROS-AGRI4.0

Luca Nardi, National Agency for New Technologies, Energy and Sustainable Economic Development - ENEA-SSPT-AGROS-AGRI4.0

Kayser Space *

Live connection with Concordia Station, Antarctica

Gabriele Carugati, Università degli Studi dell'Insubria - Station Leader (Winterover), Concordia Station - Italian National Antarctic Research Program - PNRA

Erika Rea - National Research Council – Astrophysics, Winter-over Researcher at Concordia Station over presso la Stazione Concordia PNRA

Dr. Sarah Gaier, European Space Agency Medical Doctor

Astronaut Colonel Walter Villadei, Italian Air Force *

** Speaker participation subject to confirmation*

Thursday 24 September
10:00 - 10:45

Diotallevi 1 Room, South Hall

Cross-Cutting Events
Click here

From Space to Earth and Back: Business Opportunities and ESA Funding Instruments

Organized by: ESA Technology Broker

Language: English

During the panel, space and non-space companies will present their technology transfer projects, highlighting the de-risking instruments made available by European Space Agency through the Spark Funding Open Calls, in collaboration with the Italian Space Agency.
Lessons learned at both programme and project level will be shared alongside concrete success stories, spanning applications in sport and well-being, agrifood and smart cooking, transportation, and technical textiles.

Programme

Moderator:

Anilkumar Dave

Stefano Carosio, European Space Agency - ESA Technology Transfer Broker, STAM S.r.l.

Michele Iapaolo, European Space Agency - ESA

Speaker tbc, Italian Space Agency *

Mauro Sampellegrini, Director of Research, Innovation and Sustainability, Confindustria Moda

Marco Scatto, Relicta S.r.l.

Michele Andolfo, Artigo S.p.A., Mondo Group

** Speaker participation subject to confirmation*

Thursday 24 September
10:00 - 11:00

Main Stage, Hall C1

Unmanned Operations – Human and Autonomous Exploration
Click here

Technology Transfer between Space and Deep-Sea Ecosystems: Analogies and Differences in Space and Underwater Innovation

Organized by: BEX – Beyond Exploration Expo, in collaboration with ASI – Italian Space Agency

Language: English

Space and underwater environments share many technological and operational challenges including extreme conditions, remote operations, autonomy, safety, communications, life-support systems, robotics, monitoring systems and mission planning. Despite their different physical and regulatory contexts, both domains increasingly rely on advanced infrastructures, resilient systems and data-driven operational capabilities.
This session will explore the growing technological convergence between space and maritime domains, with a particular focus on deep-sea ecosystems, highlighting how methodologies, technologies and know-how can be exchanged, adapted and integrated across domains. The discussion will also address emerging opportunities for industrial collaboration, cross-domain innovation and dual-use applications.

Programme

Moderator:
Maria Libera Battagliere, Italian Space Agency - ASI

Speakers:
Opening keynote
Operational needs and emerging challenges driving the convergence between the Space and Maritime domains
Marina Militare *

Opening Address
Strategic Outlook: Geopolitics, Blue Economy and Emerging Maritime Trends
Gabriele Costantini, Journalist at Il Secolo XIX, adriatic.eu and blueeconomy.eu

Space-Based Capabilities for the Blue Domain
Francesca Pieralice, Italian Space Agency - ASI

Digital Twins and Virtual Engineering for Space and Underwater Systems (How virtual twins and collaborative engineering platforms can accelerate innovation across the Space and Blue domain)
Fincantieri - Industrial Applications *

Technologies and materials for extreme environments: transferring aerospace engineering methodologies to underwater systems
Antonio Concilio, Italian Aerospace Research Centre - CIRA

** Speaker participation subject to confirmation*

Thursday 24 September
11:00 - 13:30

Diotallevi 1 Room, South Hall

Unmanned Operations – Human and Autonomous Exploration
Click here

Empowering Public Security and Emergency Management trough Satellite data and Unmanned Systems

Organized by: BEX Scientific Technical Committee

Language: English

Risk prevention and decision support in complex scenarios — including natural emergencies, public safety and investigative activities — have greatly benefited from the intelligent use of satellite data, integrated with aerial, ground, surface and underwater drone systems.

The event will serve as a platform for dialogue among institutions, operators and stakeholders, with the aim of enhancing synergies between space, autonomous technologies and public security, strengthening the effectiveness of national prevention, response and resilience capabilities.

Thursday 24 September
11:30 - 13:15

Main Stage, Hall C1

Entrepreneurship, Economy & Finance
Click here

Space Finance Arena - Where Capital Meets Space Innovation

Organized by: BEX – Beyond Exploration Expo, in collaboration with Plug and Play

Language: English

As the Space Economy enters a new phase of growth, access to capital has become a key driver of innovation and competitiveness. Space Finance Arena brings together entrepreneurs, investors, banks and public financial institutions to explore how venture capital, banking and public funding can accelerate the growth of startups and SMEs. More than a traditional conference, it is a business-oriented platform designed to foster investment, strategic partnerships and new opportunities across the European Space Economy. The objective is to connect companies, investors and financial institutions, accelerating innovation and sustainable growth.

Programme

Moderator

Isabella Bufacchi, Journalist Il Sole24Ore

Roundtable: market landscape & capital mapping

Overview of investment dynamics, capital stack and key trends

Giuseppe Lorizzo, Partner EY

Augusto Cramarossa, Head of Strategic Area Coordination and New Space Economy, Italian Space Agency - ASI

Sascha Deutsch, Commercialisation Gateway Business Analyst European Space Agency - ESA

Lorenzo Scatena, General Secretary Fondazione E. Amaldi

Simonetta Di Pippo, Space Economy Evolution Lab SDA Bocconi

Roundtable: how space startups seally get funded

Discussion on investment criteria, timelines and funding strategies

Matteo Botticelli, Senior Partner, Responsible Fondo Italia Space Venture at Italian National Promotional Institution - CDP Venture Capital SGR

Luca Passariello, Business Development lead Servizi Assicurativi del Commercio Estero - SACE

Paolo Giovanni Panzarini, Innovation Finance Manager Intesa San Paolo

Francesco Brescia, Senior Ventures Associate Aerospace Plug and Play

Simone Lavizzari, Principal Join Capital

Founder case

One or two real-life examples of start-ups and scale-ups among those present, who will share their journey of growth and fundraising, including the challenges, mistakes and lessons learnt

Dario Loffredo, CFO Argotec Group

Matteo Andreas Lorenzoni, Orbital Access Business Unit Director D-Orbit

Investor reverse pitch

Investors present ticket size, sectors and access to deal flow

Ilaria Cavalleri, Investment Principal Primo Space

Roberto Grosso, Partner TLI Space

Alexandre Bonnet, Investment Manager, SpaceFounders

ESA INCUBED current and upcoming funding opportunities

Eligibility criteria, co-funding mechanisms and real case examples from the InCubed programme for startups, SMEs and non-space companies. At the end of the session, participants will have the opportunity to request a direct meeting with ESA within the Innovation District

Piera Di Vito, European Space Agency - ESA Phi Lab

Q&A

Networking Lunch

Thursday 24 September
11:45 - 13:00

Exploration Arena, Hall C1

Tech Fashion & Textile
Click here

Technical Textiles for Space: innovation, advanced materials, and new opportunities for the Italian supply chain

Organized by: Confindustria Moda

Language: English

Presentation of the Technical Textiles for Space White Paper, promoted by Confindustria Moda within the framework of the Italian Aerospace Technology Cluster (CTNA). The White Paper highlights the strategic role of technical textiles in space applications, outlines the key technological trends shaping the sector, and explores opportunities for collaboration among industry, research organizations, and public institutions.

The session will also feature presentations from Italian companies showcasing real-world innovation case studies and advanced solutions developed for the space sector.

Thursday 24 September
14:00 - 15:30

Diotallevi 1 Room, South Hall

Space Physiology, Healthcare, Wellness, Pharmacy
Click here

Biospace economy. New opportunities for Physiology, Healthcare, Wellness, Pharmacy - Session I

Organized by: CNR ISOF - Institute for Organic Synthesis and Photoreactivity of the National Research Council

Language: English

After decades of human activity largely confined to low Earth orbit, space exploration is once again moving toward deep space. With the successful completion of the Artemis II mission and the planning of future missions to Mars, human presence beyond Earth orbit is becoming a concrete objective. Achieving this ambition requires addressing **unprecedented challenges that extend well beyond engineering and propulsion, placing biomedical and physiological questions at the center** of space exploration strategies.

Prolonged exposure to cosmic radiation, combined with the effects of microgravity, has profound impacts on multiple organs and physiological systems. Sustained living and working in space therefore demand a new level of understanding, monitoring, and control of the biological processes that govern human health under **extreme and potentially lethal conditions**. These challenges are redefining priorities for space missions and, at the same time, opening new markets and innovation pathways on Earth.

As a result, space-related technologies are rapidly expanding in scope and impact, creating strong momentum across materials science, advanced manufacturing, and enabling technologies aimed at preserving, monitoring, and enhancing human health and wellbeing. **Innovations originally driven by space life sciences are now converging with biotechnology, medicine, and pharmaceutical research**, generating transformative opportunities for both in-orbit applications and terrestrial healthcare systems.

The event aims to foster a high-level dialogue among academia, SMEs, and major industry players on how the integration of materials science, advanced manufacturing, physiology, bioengineering, and technologies can:
1) ensure astronaut safety and wellbeing during long-duration microgravity and deep-space missions;
2) offer new opportunities in this emerging BioSpace economy for companies already proficient in the Healthcare, Wellness, Pharmacy business.
Beyond showcasing selected success stories, the session will highlight how existing industrial capabilities and research approaches can be translated into new applications enabled by microgravity and space conditions. The discussion will connect **spaceflight and infrastructure providers with biomedical, pharmaceutical, and biotechnology stakeholders**, while also addressing the downstream benefits for healthcare on Earth with a focus on radiation-shielding materials, health-monitoring sensors and telemedicine systems, AI-driven data analysis, bioelectronics, in-space biomanufacturing, and cell-based assays.

The event will be structured into two interactive sessions. Each session will open with short, inspirational talks designed to set the scene and stimulate discussion, followed by a moderated panel and open Q&A aimed at encouraging exchange, cross-sector collaboration, and concrete industrial perspectives.

Programme

Introduction: scope of the meeting and presentation of the speakers
Vincenzo Palermo, Research Director, Institute for Organic Synthesis and Photoreactivity (ISOF), National Research Council of Italy (CNR)

Telemedicine and space; societal impact of Malindi space center within Italy-Kenya partnership
Leonardo Gagliardi, President ASAS - Association for Space-based Applications and Services

In-orbit validation of soft radiation shielding during AXIOM-3 crewed mission: problems solved and lessons learnt
Alessio Grasso, Aerospace & Defense Business Unit Manager, Dallara

Q&A panel
Moderator:
Vincenzo Palermo, Research Director, Institute for Organic Synthesis and Photoreactivity, National Research Council of Italy - CNR-ISOF

Andrea Liscio, Senior Researcher, Institute for Microelectronics and Microsystems (IMM), National Research Council of Italy - CNR
Leonardo Gagliardi, President ASAS
Alessandro Grattoni, Houston Methodist Hospital *
Davide Santachiara, CEO and e Project Manager DTM Technologies
Nicolò Benini, Business Development Manager Marketing NPC spacemind
Franco Lori, EcoAida srl

** Speaker participation subject to confirmation*

Thursday 24 September
14:00 - 15:30

Exploration Arena, Hall C1

Unmanned Operations – Human and Autonomous Exploration
Click here

From Space to Field: remote sensing data for innovative, sustainable and competitive agriculture

Organized by: Confagricoltura

Language: English

Agriculture is undergoing a technological revolution, where data represents the new means of production for a proactive, sustainable and competitive farming sector. According to the latest studies, the Italian Agriculture 4.0 market is growing again after the decline of 2024, reaching 2.5 billion euros (+9%), driven by software solutions such as FMIS and DSS and by investments in connected machinery. Despite this, the level of digital maturity remains uneven: only 9% of companies are digitally mature, while 58% are still lagging behind, also due to dependence on public incentives (only 21% would invest without subsidies).

In this context, remote sensing is confirmed as a key enabler of the digital, ecological and energy transition envisaged by Europe. Through prescription maps, vegetation indices and multispectral analyses, remotely sensed data allow companies to move from reactive practices to personalised strategies, preventing critical issues and improving productivity and quality.

The conference aims to explore how these technologies can overcome the barriers to adoption (costs, skills, resistance) and maximise return on investment. Following two introductory presentations and the testimony of a pioneering agricultural company, the round table will provide a space for discussion on how to translate data into concrete actions, from acquisition to field application.

Programme

Moderator: Ivano Valmori

Keynote speech
Remote Sensing to Support Smart Agricultural Operations Management
Daniele Sarri, Università di Firenze

Keynote speech
Remote Sensing Data for Monitoring and Traceability of Cultivated Areas
Fabio Vitale, Director of Agricultural Grants Agency - AGEA

Case study
Azienda Agricola Porto Felloni

Round table
Massimiliano Giansanti, Confagricoltura President
Rita Rinaldo, Head of Applications Projects & Studies Division in European Space Agency - ESA
Fabio Vitale, Director of Agricultural Grants Agency - AGEA
Mario Salipante, Innovative Mobility Directorate National Civil Aviation Authority - ENAC *

** Speaker participation subject to confirmation*

Thursday 24 September
14:30 - 17:30

Main Stage, Hall C1

Industrial Diversification and Transition to the Space Sector
Click here

Advanced Manufacturing for Space: From Earth Qualification to In-Orbit Production

Organized by: BEX Scientific Technical Committee

Language: English

14.30 – 15.00
Keynote speech
Tommaso Ghidini, Head of the Mechanical Department
European Space Agency - ESA

15.00 – 16.30
Lombardia Aerospace Cluster and the interlinked supply chains
Organized by Lombardia Aerospace Cluster

For many industrial companies, business diversification strategies represent a key lever for sustaining competitiveness in environments characterized by rapid evolution, technological transformation, and pressure on traditional markets. In this context, the space sector is gradually emerging as a potential area of expansion for non-space companies, thanks to the growing diffusion of space-enabled applications and the opportunity to leverage established skills, products, and processes in new market contexts. The potentially targeted sectors are automotive, health and textiles, as they have been identified as among the most promising for potential convergence trajectories with the space economy. These sectors feature high manufacturing expertise and strong technological innovation dynamics that can generate tangible value in the medium term.

16.30 – 17.30
From Market to Space: Essential Accreditation Elements
Organized by BEX Scientific Technical Committee

Analysis of the key requirements for accessing the space sector, including certification processes, insurance frameworks, and risk management for companies operating in the Space Economy.

Mapping Italy's Aerospace Innovation through European Patents
Dedicated presentation of the Unioncamere-Dintec-BEX report analyzing Italy's European patent portfolio in the aerospace sector. The study offers a data-driven overview of the country's technological positioning, mapping patent trends and key innovation clusters. The report is designed to support policymakers, industry stakeholders, and the Chamber of Commerce system in identifying growth opportunities and reinforcing Italy's competitiveness in one of the most dynamic frontiers of global innovation.

Presented by: Giovanni Manigrasso, Dintec-Unioncamere

** Speaker participation subject to confirmation*

Thursday 24 September
16:00 - 17:00

Exploration Arena, Hall C1

Beyond Tech Communication
Click here

Innovation Communication Lab – From Technology to Market

Organized by: Confindustria - Technical Group for Internationalization

Language: English

Communicating, storytelling, presenting and selling innovation.
Innovation Communication Lab is a strategic, business-oriented and hands-on experience, not just theoretical.
Its goal is to support companies, startups and research centers in transforming complex technologies into clear, valuable and market-ready propositions – facilitating partnerships, investments and market growth.

The 1-hour session will be structured into four focused micro-tutorials:
1. Communicating Complex Technologies: turning complexity into value
2. Storytelling Innovation: crafting compelling innovation narratives
3. Presenting Innovation: delivering effective pitches
4. Selling Innovation: from lab to market

Thursday 24 September
16:00 - 17:00

Pitch Arena, Hall C1

Cross-Cutting Events
Click here

Earth Observation for Natural Catastrophe Risk: from Data to Decisions

Organized by: IEG - Italian Exhibition Group, with content support from ClimateCharted

Language: English

Italy is entering a new phase in the management of natural catastrophe risk, with a growing focus on resilience, prevention and risk transfer. In a country where more than 90% of municipalities are exposed to floods, landslides or other natural hazards, and where annual losses exceed €7 billion, effective risk assessment, insurability and prevention all depend on one essential ingredient: better spatial data.

This panel explores the role of Earth Observation as the data layer underpinning the entire catastrophe-risk lifecycle. Satellite data support the development of hazard maps, improve the understanding of exposure by identifying where assets are located and how vulnerable they are, and increasingly inform pricing, underwriting and risk financing decisions. They also play a critical role after disasters, enabling near-real-time monitoring for emergency response and providing objective evidence that accelerates damage assessment and claims settlement. Connecting these data to decisions - across both the public and private sectors - is what turns observation into action.

The session brings together the perspectives that shape the catastrophe-risk value chain, all anchored in Earth Observation data: how public authorities use it to guide territorial planning and climate adaptation; how research transforms it into models and scientific knowledge; how the insurance and financial sectors rely on it to assess, price and transfer risk; and how the Earth Observation ecosystem - agencies, data providers and innovative companies - translates satellite data into operational services. The discussion will offer a high-level institutional perspective on how these actors can work together within an integrated catastrophe-risk ecosystem, starting from a shared foundation of Earth Observation data.

Programme

Ludovico Giorgio Aldo Biagi, Department of Civil and Environmental Engineering, Politecnico di Milano

Giulia Balugani, Sustainability Manager, Gruppo Unipol

Alberto Dellavalle, Comune di Rimini

European Space Agency - ESA *

Gaetano Volpe, CEO Latitudo 40

** Speaker participation subject to confirmation*

Thursday 24 September
16:00 - 17:00

Diotallevi 1 Room, South Hall

Unmanned Operations – Human and Autonomous Exploration
Click here

Integrated Solutions for Advanced and Smart Mobility

Organized by: Politecnico di Milano - Drone and Advanced Air Mobility Observatory

Language: English

The round table will explore the role of integrated solutions in enabling advanced and smart mobility, with particular attention to the interaction between aircraft, ground infrastructure, digital platforms, energy systems, and airspace management. The discussion will also highlight the growing contribution of space-based services - including satellite navigation, communications, connectivity, and Earth observation - as key enablers of safe, resilient, and scalable operations. Bringing together institutions, industry, operators, and research, the panel will address relevant use cases, enabling technologies, and the regulatory conditions required to move from experimentation to operational services, while combining innovation with safety, sustainability, and social acceptance.

Programme

Moderator:
Prof. Marco Lovera, Department of Aerospace Science and Technology and Drone and Advanced Air Mobility Observatory, Politecnico di Milano

Presentation on the Digital Twin for Innovative Air Service project
Marco Catalano, Innovative Mobility Directorate, ENAC

Presentation on the use of integrated data for the development of civil aviation
Luca Valerio Falessi, Airspace Directorate, ENAC

Fausto Starita, Head of Sales, Italy Market - LoB Satellite Communications, Telespazio *

FlyingBasket *

** Speaker participation subject to confirmation*

Thursday 24 September
18:00 - 19:00

Main Stage, Hall C1

Networking Events
Click here

Space cocktail

Language: English

Set within the House of the Astronaut project, the Space Cocktail offers a unique platform for engagement, storytelling, and networking among key decision makers and sector visionaries.

Friday 25 September
10:00 - 11:30

Diotallevi 1 Room, South Hall

Cross-Cutting Events
Click here

The Future of Satellite Market

Organized by: Emilia-Romagna Region

Language: English

The satellite industry is undergoing an unprecedented transformation, moving from an era of static, government-owned infrastructure to a dynamic ecosystem dominated by private players and massive constellations.
Going a little deeper into this transformation, the satellite market is shifting toward data-driven and service-based models, reshaping how value is created and captured across the value chain. In this evolving context, small and medium-sized enterprises (SMEs) are increasingly moving beyond traditional subcontracting roles and may emerge as key actors capable of innovation and value creation.
This contribution focuses on how SMEs might position themselves along the vertical integration–outsourcing spectrum. Rather than replicating fully integrated models, they may consider selectively internalizing high-value activities—such as software, payloads, edge computing, and data analytics—while relying on external partners for standardized components. This raises the question of whether such approaches can enable SMEs to act both as niche innovators and as flexible integrators within complex systems such as satellite constellations.
More broadly, it highlights how SMEs may operate within value chains traditionally dominated by vertically integrated firms, exploring their potential role as both contributors to large-scale industrial systems providing modular components and autonomous actors in increasingly scalable and innovation-driven satellite markets.
This workshop will attempt to answer this question, trying to understand on the one hand whether this market is sustainable for an SME and where it could concretely land, both in terms of technological evolution and management evolution.

Friday 25 September
10:00 - 11:30

Main Stage, Hall C1

Emerging Professions
Click here

Italy Aerospace Competences: Soft Skills and Complexity Management

Organized by: Alma Mater Studiorum – University of Bologna and Tecnopolo Forlì-Cesena

Language: English

Aerospace is not just a high-tech sector: it is a production infrastructure of complexity. In this context, skills can no longer be understood as a simple sum of technical knowledge, but rather as a systemic capability to integrate knowledge, manage uncertainty, and coordinate complex production networks.

The future of aerospace skills in Italy increasingly lies at the intersection of hard and soft skills: engineers able to engage in dialogue, designers capable of orchestrating complex processes, and professionals who combine technical depth with relational intelligence. This roundtable aims to open a discussion on this transformation, exploring how to rethink education, organizations, and skills development models from an evolutionary perspective.

Programme

Moderator:
Lorenzo Ciapetti, Forlì-Cesena Technopole

Speakers:

Franco Bernelli Zazzera, Full Professor of Aerospace Engineering at the Politecnico di Milano, Former Chairman of Pegasus

Domenico Accardo, Università degli Studi di Napoli Federico II

Air Force Academy *

Giovanna Labartino, Centro Studi Confindustria

Hady Milani, European Institute of Innovation for Sustainability - EIIS, Director of the Space Entrepreneurship Program at the European Institute of Innovation for Sustainability

Anna Pia Spada, HR Director SITAEL

** Speaker participation subject to confirmation*

Friday 25 September
10:00 - 11:00

Exploration Arena, Hall C1

Resources Exploitation and Sustainability
Click here

Space for Energy or Energy for Space?

Organized by: ENEA - National Agency for New Technologies, Energy and Sustainable Economic Development

Language: English

Advanced energy systems are a strategic enabler for space and defence missions, where lightweight design, reliability, long operational life, and performance under extreme or hazardous conditions are essential. This session brings together Small and Medium-sized Enterprises (SMEs), research and development organisations, regulatory and policy driven bodies, and large industrial players to address the full innovation and deployment chain of next generation energy solutions. The discussion will focus on advanced and nuclear based energy systems for space, including radioisotope power systems and compact nuclear reactors for long duration and deep space missions, alongside advanced batteries, advanced PV, hybrid architectures, and high efficiency power electronics. Particular attention will be given to the potential benefits and challenges of integration and distribution, in the perspective of a multi-source energy system with manyfold energy uses.

Research and development bodies will address technology maturation, testing, and validation, while regulatory and policy actors will contribute with perspectives on safety frameworks, certification, strategic autonomy, and alignment with European and defence policies. Large enterprises and system integrators will highlight industrial scalability, supply chain resilience, and system level integration into complex platforms. The session aims to foster cross actor collaboration in order to accelerate innovation, de-risk deployment, and strengthen European competitiveness in critical space and defence energy technologies.

Complementing this hardware-focused framing, long-duration and deep-space missions require energy systems to operate with limited or no ground intervention. This positions the digital, AI-driven layer as a necessary part of the discussion. From the opposite direction, Earth Observation products and the computer-vision and machine-learning pipelines that exploit them will be discussed as critical input for forecasting and diagnostics of terrestrial renewable plants.

Programme

Chair:
Francesca Brunetti

Lunar Energy System by Nuclear Energy
Francesco Lodi, Project Manager of SELENE, National Research Agency - ENEA

Advanced P:V from hearth to Space
Corrado Colli Executive Vice President Business Unit Space, Italian Electrotechnical Experimental Centre - CESI *

Battery for Space
Luca Bono, Be2Hub s.r.l

The Intelligent Layer of Space Energy Systems
Gabriele Piantadosi, Energy Technologies and Renewable Sources Department, National Research Agency - ENEA

Radioisotope power systems
Stellar Nuclear *

Nuclear for Innovation: Advanced Materials Supporting Space Applications
Andrea Barbensi, NEWCLEO *

** Speaker participation subject to confirmation*

Friday 25 September
10:00 - 11:30

Diotallevi 2 Room, South Hall

Space Laws
Click here

Space law: what actions for a viable scenario?

Organized by: CIRA - Italian Aerospace Research Center

Language: Italian

Recently, space has been seeing a significant expansion of human activities. Over the past five years, business volume has increased by an average of around 9% annually, outpacing global GDP growth and reaching a market value of over USD 600 billion in 2025 (source: *Space Industry Statistics & Facts 2026 | SpaceNexus*). At the same time, the number of objects launched into space has increased by a factor of ten over the last decade (source: *The Growth of the Space Economy*).

This growth is expected to continue in the coming years, as this new domain promises substantial economic returns through the provision of services increasingly in demand by the general public, as well as through new potential prospects that are beginning to emerge, such as the colonisation of the Moon.

As the economy expands, so do the actions and interactions between individuals, companies and states - and, with them, the possibility of disputes. Moreover, unrestricted business activity in the space sector, if not properly regulated, could generate risks for society as a whole, as well as dangers for individuals or even for multiple sovereign states.

At the same time, regulation in this field cannot be purely restrictive. Beyond the economic prosperity that the Space Economy promises to generate - which naturally leads legislators to view it favourably - there is a strong likelihood that overly burdensome regulation will lead to a shift in investment towards more accessible jurisdictions.

These brief considerations offer a first sense of the complexity of a new universe that must be managed and that, by its very nature, can only be shared among different state systems. Ultimately, the uniqueness of space activities means that the only segment that can truly be governed is the terrestrial one. Once objects are inside orbits or beyond, in the so-called deep space, they tend to escape any single jurisdiction, unless that jurisdiction is collective.
These are the themes that the speaker and panellists will explore, covering legal, legislative, industrial and defence-related perspectives, with the aim of helping to clarify certain aspects of a complex process that is still far from being fully resolved.

Programme

Introduction:
Eng. Antonio Concilio, Italian Aerospace Research Center - CIRA

Moderator:
Dr. Andrea Colucci, Promotion Research Consultancy - PRC

Lecturer:
Prof. Tommaso Edoardo Frosini, Italian Aerospace Research Center - CIRA

Round Table:

Eng. Stefano Beco, AIAD - Italian Industries Federation for Aerospace, Defence and Security
Prof. Fabrizio Cassella, University of Turin
Prof. Valeria Falce, UNIER - European University of Rome
Dr. Stefano Gualandris, ASI - Italian Space Agency

Conclusions:
Gen. Luigi Riggio, Presidency of the Council of Ministers *

** Speaker participation subject to confirmation*

Friday 25 September
11:30 - 13:00

Exploration Arena, Hall C1

Beyond Tech Communication
Click here

Space Voices: Where Creators, Community and Industry Meet

Organized by: BEX – Beyond Exploration Expo

Language: English

At BEX, creators and science communicators don't just tell stories– they build bridges between industry and people, between space and everyday life.
This non-conventional session brings together the voices that shaped BEX's pre-event narrative, alongside exhibiting companies and the communities they engage and inspire.
More than storytelling, the conversation explores the evolving role of space communicators as enablers of real opportunities - connecting people with careers, business pathways and scientific innovation.
Together, creators and companies will define a new kind of influence: one that goes beyond visibility to activate engagement, unlock potential and turn curiosity into concrete action.
Because the future of space will not be shaped by technology alone, but by those who can make it visible, understandable - and truly accessible to all.

Participants:

Vittorio Baraldi, Content creator and space science communicator
@astroviktor

Chiara Brunetti, Content creator STEM
@generazioneSTEM

Gian Luca Comandini, Digital Innovation Expert and Science Communicator
@giallucoma

Antonio Iannone, Content creator
@thefoodcons

Luca Perri, Astrophysicist & Science Communicator
@astrowikiperri

Friday 25 September
11:30 - 13:00

Diotallevi 1 Room, South Hall

Space Physiology, Healthcare, Wellness, Pharmacy
Click here

Biospace economy. New opportunities for Physiology, Healthcare, Wellness, Pharmacy - Session II

Organized by: CNR ISOF - Institute for Organic Synthesis and Photoreactivity of the National Research Council

Language: English

After decades of human activity largely confined to low Earth orbit, space exploration is once again moving toward deep space. With the successful completion of the Artemis II mission and the planning of future missions to Mars, human presence beyond Earth orbit is becoming a concrete objective. Achieving this ambition requires addressing **unprecedented challenges that extend well beyond engineering and propulsion, placing biomedical and physiological questions at the center** of space exploration strategies.

Prolonged exposure to cosmic radiation, combined with the effects of microgravity, has profound impacts on multiple organs and physiological systems. Sustained living and working in space therefore demand a new level of understanding, monitoring, and control of the biological processes that govern human health under **extreme and potentially lethal conditions**. These challenges are redefining priorities for space missions and, at the same time, opening new markets and innovation pathways on Earth.

As a result, space-related technologies are rapidly expanding in scope and impact, creating strong momentum across materials science, advanced manufacturing, and enabling technologies aimed at preserving, monitoring, and enhancing human health and wellbeing. **Innovations originally driven by space life sciences are now converging with biotechnology, medicine, and pharmaceutical research**, generating transformative opportunities for both in-orbit applications and terrestrial healthcare systems.

The event aims to foster a high-level dialogue among academia, SMEs, and major industry players on how the integration of materials science, advanced manufacturing, physiology, bioengineering, and technologies can:

1) ensure astronaut safety and wellbeing during long-duration microgravity and deep-space missions;

2) offer new opportunities in this emerging BioSpace economy for companies already proficient in the Healthcare, Wellness, Pharmacy business.

Beyond showcasing selected success stories, the session will highlight how existing industrial capabilities and research approaches can be translated into new applications enabled by microgravity and space conditions. The discussion will connect **spaceflight and infrastructure providers** with **biomedical, pharmaceutical, and biotechnology stakeholders**, while also addressing the downstream benefits for healthcare on Earth with a focus on radiation-shielding materials, health-monitoring sensors and telemedicine systems, AI-driven data analysis, bioelectronics, in-space biomanufacturing, and cell-based assays.

The event will be structured into two interactive sessions. Each session will open with short, inspirational talks designed to set the scene and stimulate discussion, followed by a moderated panel and open Q&A aimed at encouraging exchange, cross-sector collaboration, and concrete industrial perspectives.

Programme

The Aphrodite Project: cell-based assays to protect human health in space
Mara Mirasoli, University of Bologna - Tecnopolo di Rimini
Serena Pezzilli, ASI – Italian Space Agency

Impact of microgravity on the cardiovascular system
GVM *

Q&A panel
Moderator:
Elena Galli, Aerohub Project Coordinator, Cluster MECH, Emilia-Romagna Region

Mara Mirasoli, University of Bologna – Tecnopolo di Rimini
GVM *
Laura Spinelli, Senior Product Manager - Telemedicine and Telemonitoring, CGM *
Angelo Taibi, University of Ferrara
Davide De Pietri Tonelli, Italian Institute of Technology (IIT)
Valentina Benfenati, Clust-ER Health, CNR
Marco Seri, Policlinico Sant'Orsola

** Speaker participation subject to confirmation*

Friday 25 September
12:00 - 13:00

Main Stage, Hall C1

Cross-Cutting Events
Click here

AI and resilience at the frontier of space operations

Organized by: CINECA, Bruno Kessler Foundation

Language: English

The space economy is generating data on an unprecedented scale, and artificial intelligence is emerging as a key technology for transforming this information into operational and scientific value. The central question is therefore how AI is supporting space mission design, autonomous operations and downstream applications, opening up new opportunities for cross-sector innovation. In this context, ensuring the integrity and resilience of AI-driven systems is emerging as an increasingly central strategic and industrial challenge.

The session brings together scientific, industrial and institutional perspectives to understand where Europe stands, which application domains hold the greatest promise, and how synergies between actors from sectors not traditionally associated with space can contribute to building an intelligent and sovereign infrastructure.

Programme

Moderator:
Eng. Andrea Possenti, National Institute for Astrophysics - INAF

Speakers

Marco Folegani, Owner and Co-founder, MEEO Srl

Dr. Francesca Bovolo, Remote Sensing for Digital Earth Unit Head at Fondazione Bruno Kessler

Network Operations Command (COR), Italian Defence General Staff *

Davide Silvestri, Computer Vision Solutions Architect SIDEIUS Srl

** Speaker participation subject to confirmation*