

Expo 2020 Dubai

WORLD MAJLIS AGENDA

SPACE WEEK

17-23 October 2021



POWERS OUT OF THIS WORLD

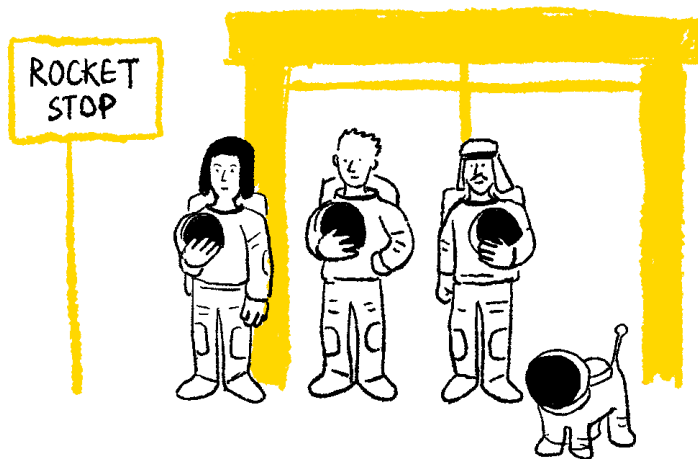
Using space for the benefit of all humanity

in collaboration with Italy and Portugal

DATE Sunday, 17th October 2021

TIME 4.00 to 6.00 PM UAE

VENUE Terra - The Sustainability Pavilion



THE CONVERSATION TOPIC

POWERS OUT OF THIS WORLD

Using space for the benefit of all humanity

With humanity pushing the limits of science, human psychology, and physical capabilities in order to conquer the “final frontier”, new players are looking at how space exploration can benefit more people, more equally.

Once the domain of the “superpowers”, space exploration is now accessible to many new actors, including both national governments and private companies. As the paradigm shifts away from exploration towards a new focus on commercialisation, technologies originally developed for space exploration are proving to be game-changers down here on Earth, for more people.

Space research has already led to many positive innovations, in areas including Earth observation, health and medicine, new materials, transportation, computer technology, recycling, biotechnology and energy management.

Today — with incredible opportunities on the horizon, from space mining to off-world settlements — new questions arise as to how the benefits of space exploration can reach the whole of humanity.

What benefits does space exploration bring to humanity?

How can we make the benefits of space exploration more widely accessible?

With more nations and companies engaged in space exploration, what are the priorities and what regulations do we need?

What is the next big frontier in space exploration?

MODERATOR



SAEED AL GERGAWI

Director, Dubai Future Academy, UAE

Saeed Al Gergawi is the Director of the Dubai Future Academy, the capacity-building arm of the Dubai Future Foundation, which works in building and developing capacity in future foresight by empowering leaders with the skills necessary to adapt to the future. Prior to joining the Dubai Future Foundation, Saeed worked as the Program Manager for the "Mars 2117" initiative at the Mohammed bin Rashid Space Centre, the UAE's 100-year space exploration strategy. In addition, Saeed was a member of the strategic planning team for the Emirates Mars Exploration Project "Probe of Hope".

PARTICIPANTS



IBRAHIM AL QASIM

UAE Space Agency, UAE

PROFESSOR MICHÈLE LAVAGNA

Professor in Flight Mechanics at Politecnico di Milano, Italy

Professor Michèle Lavagna graduated with a Ph.D. in Aerospace Engineering from Politecnico di Milano. She's been nominated advisor to the Italian inter-Ministerial Committee for Space and Aerospace Policy; nominated national expert for Cluster4 Horizon Europe framework; nominated as expert for Space for the Research and university Italian Ministry. She is a member of the EU Copernicus Academy, an affiliated member of Istituto Nazionale di Astrofisica (INAF) and a member of the HESAC (Human & Robotic Exploration Advisory Group) of the European Space Agency.

Furthermore, she is an expert evaluator for the European Commission in the "Horizon 2020 framework", a member of the WG for the AIDA-HERA mission to binary asteroid (NASAESA), a member of the PROSPECT package science User Group for the Moon landing mission; coordinator for the drilling WG, a member of the European Space Agency Lunar Sample Return Science Definition Team and a full member of the International Academy of Astronautics.





MIGUEL BELLÓ

CEO, Atlantic International Research Centre (AIR Centre), Spain

Miguel Belló is CEO of the Atlantic International Research Centre (AIR Centre), an international organisation to develop scientific and technological applications in the Atlantic region. Miguel has been entrepreneur in the European Space sector involved in the management of International Space Programs and Institutions.

Miguel was founder and CEO of all companies in DEIMOS Group in Spain, Portugal, United Kingdom, Romania and Italy. He is expert in Space Systems Operations, Space System Engineering, Earth Observation systems and applications, Interplanetary Mission Design, Launcher Trajectory Optimization and Space Debris.

Miguel is Full Member for Section 2 (Engineering Sciences) of the International Academy of Astronautics (IAA), Member of the Astrodynamics Committee of the International Astronautical Federation (IAF), Chairman of the Mission and Constellation Design Session of the IAC Astrodynamics Symposium. Miguel was Member of the European Space Agency Space Debris Advisory Group (SDAG) and Invited Professor on Space Debris Environment at the Universidad Politécnica in Madrid and Celestial Mechanics at La Sapienza University in Rome.



RICARDO CONDE

President, Portuguese Space Agency, Portugal

Ricardo Conde, 55 years old, is the father of two beautiful girls. He holds a degree in Electrical and Computer Engineering from IST – Technical University of Lisbon – and a postgraduate degree in Space Technologies. He began his professional career in 1991, having been linked to the Aeronautics and Space sector in the Industry since 1993 with the participation in several National and International Space programs, in particular in Space and Ground segments. In 2019 Ricardo joined the Portuguese Space Agency, Portugal Space as a member of the board. About one year later, he was appointed President of the Portuguese Space Agency.



SERGEI KRIKALEV

Russian cosmonaut

Executive Director for Human Space Programs of the "Roscosmos" State Space Corporation, Russia

After graduating from the Leningrad Mechanical Institute and earning a degree in mechanical engineering in 1981, Sergei became an engineer and four years later became a civilian trainee cosmonaut. He was selected as a cosmonaut in 1985 and was assigned to the Buran Shuttle program.

Sergei Krikalev has made 6 space flights: his first in 1988 and his sixth in 2005. Sergei has made eight spacewalks (EVA) and for 10 consecutive years was the holder of the world record for the duration of a total stay in space: 803 days, 9 hours and 42 minutes. He was actually in space when the Soviet Union was dissolved on December 1991; and stayed on the MIR space station for 311 consecutive days, twice as long as the mission had originally called for.

Sergei Krikalev was also the first Russian cosmonaut to fly an American shuttle in 1994.

In December 1998, he participated in the first mission to assemble the International Space Station (ISS). In October 2000, Sergei began a permanent manned presence to the ISS as a member of the first long-term international expedition crew. The astronauts met the 21st century in orbit.

Sergei has been awarded the Star of the Hero of the Soviet Union and the Star of the Hero of the Russian Federation. He was also awarded four NASA medals, the Order of the Rising Sun, 3rd degree (Japan) and is an officer of the Legion of Honour (France).

Sergei is a member of the national aerobatic team, and a World Champion and a European glider aerobatics champion.


**VIRTUAL
PARTICIPANTS**

DR MATHIAS LINK

**Director – International Affairs & SpaceResources.lu,
Luxembourg Space Agency**

Director (ad int.), European Space Resources Innovation Centre, Luxembourg

Dr. Mathias Link is Director for International Affairs & SpaceResources.lu at the Luxembourg Space Agency (LSA), where he works on the definition and implementation of Luxembourg's space policy, with a focus on international affairs, legal & regulatory issues, research & education, as well as finance. He coordinates the SpaceResources.lu initiative that aims to promote the exploration and utilization of space resources. He is also interim Director of the European Space Resources Innovation Centre (ESRIC), an initiative of LSA, the European Space Agency (ESA) and the Luxembourg Institute of Science and Technology (LIST).

For more than 10 years, Mathias Link has represented Luxembourg in space-related boards and committees at ESA, the European Union, and the United Nations. He was involved in the preparation of several ESA Council meetings at the Ministerial level, as well as of Luxembourg's presidency of the Council of the EU in 2015. He holds a PhD in physics from the Université de Lorraine in Nancy, and a Master's in microengineering from the Swiss Federal Institute of Technology (EPFL) in Lausanne.


PROFESSOR STEVEN FREELAND

Emeritus Professor, Western Sydney University

Professorial Fellow, Bond University

Director, International Institute of Space Law, Australia

Steven Freeland is Emeritus Professor of International Law at Western Sydney University, where he was previously the Dean of the School of Law, and Professorial Fellow at Bond University. He also holds Visiting or Adjunct positions at various other Universities/Institutes in Copenhagen, Vienna, Toulouse, Hong Kong, Montreal, Kuala Lumpur, Vancouver and London. Prior to becoming an academic, he had a 20-year career as an international commercial lawyer and an investment banker.

He is a government-appointed Member of the Australian Space Agency Advisory Board and has been an advisor to the Australian, New Zealand, Norwegian and several other Governments on issues relating to national space legislative frameworks and policy. He has represented the Australian Government at Committee on the Peaceful Uses of Outer Space (UNCOPUOS) meetings and, in June 2021, was appointed by UNCOPUOS as Vice-Chair of a 5-year Working Group addressing issues related to the exploration, exploitation and utilisation of space resources. He has also been a Visiting Professional within the Appeals Chamber at the International Criminal Court, and a Special Advisor to the Danish Foreign Ministry in matters related to the International Criminal Court. He is a co-Principal of specialised space law firm Azimuth Advisory and is also a Director of the International Institute of Space Law, a Member of the Space Law Committee of the International Law Association and a Member of the Space Law and War Crimes Committees of the International Bar Association. In addition to co-Editing the Annotated Leading Cases of International Criminal Tribunals book series, he also sits on the Editorial Board/Advisory Board of several internationally recognised academic journals.

**VIDEO
CONTRIBUTION**



GIORGIO SACCOCCIA

President, Italian Space Agency, Italy

Giorgio Saccoccia is the President of the Italian Space Agency (ASI) since May 2019. He graduated from the University of Pisa (Italy) with a degree in Aerospace Engineering and from Webster University at Leiden (The Netherlands) with a Master in Business Administration.

Before joining ASI, he worked for almost thirty years at the European Space Agency (ESA) in several technical and management positions. In particular, he has been Head of the Electric Propulsion Section, Head of the Propulsion and Aerothermodynamics Division and Acting Head of the Mechanical Engineering Department of ESA. During his experience in ESA, he was in charge in different tasks as project manager and technology coordinator in particular in the field of space exploration.

Giorgio Saccoccia is an Associate Fellow of the AIAA (American Association for Aeronautics and Astronautics), Full Member of the International Academy of Astronautics (IAA) and Emeritus Member of French Aeronautics and Astronautics Association.



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