# **The GALIX Inaugural Congress 2021**

# March 18-19, 2021



# Launching the The Global Alliance for International Collaboration in Space (GALIX)

#### HOSTED BY

The Hawaii Space Industry Innovation Program (HiSPACE)

in collaboration with

The National Aeronautics and Space Administration (NASA) Space Renaissance International (SRI) The National Space Society (NSS) Space & Satellite Professionals International (SSPI)

### **CONGRESS PARTICIPANTS**

The Global Alliance for International Collaboration in Space (GALIX) The Hawaii Space Industry Innovation Program (HiSPACE) The National Aeronautics and Space Administration (NASA) **Space Renaissance International (SRI) European Space Policy Institute (ESPI) For All Moonkind Global VSAT Forum (GVF) Institute of Space Commerce** International MoonBase Alliance (IMA) International Lunar Exploration Working Group (ILEWG) **EuroMoonMars Astronautics Training Academy International Space University Lifeboat Foundation** Moon Village Association (MVA) National Space Society (NSS) **Off World Inc. Space 3.0 Foundation** Space & Satellite Professionals International (SSPI)

#### **CONGRESS GOALS**

This multinational online event seeks to expand and diversify international collaboration in space. The development of space programs often focuses on new space technologies and hardware. Yet the 'softer parts' of this enterprise — space policies, regulation, law, education, training, safety and environmental standards, institutional development, and global collaborative arrangements — are also critical for holistic space enterprise that ultimately could help reduce the costs, enhance the benefits, and accelerate timetables for space missions. This latter emphasis is the focus of the GALIX Inaugural Space Congress 2021.

#### **REGISTRATION**

Please register for this event online at <u>https://www.galix.net</u> and complete your registration as soon as possible. Participants can register on a first come first served basis. There is no charge to register for this online Congress.

#### **UPCOMNG ON-LINE EVENTS**

Please see the listing of upcoming events at the end of this announcement.

#### **CONFERENCE PRESENTATIONS AND PAPERS**

Presenters at the GALIX Conference are invited to make a 5-minute Power Point presentation. If they wish, they can also submit short papers. These will typically be no longer than 2000 words in length. There will also be a final report on the Congress that reflects major points of emphasis in the panel discussions and possible future areas for collaboration in global space activities. Those who sign up to participate in the Galix Congress may submit questions to the panelists online. (at URL: galix.net). Please click on "GALIX Congress 2021", then click on the "Registration" menu button. You may also email us at info@galix.net.

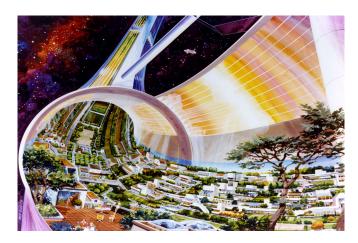
GALIX.net will have an ongoing Forum page that focuses on "New Ideas for Global Collaboration and Cooperation in Space".

#### **Call for Papers**

- 1. GALIX is issuing a "Call for Papers". Please submit abstracts at <u>info@galix.net</u>, or you may upload these online to URL: galix.net. Click on the GALIX Congress menu button, then click on the "Call for Papers" menu button, fill in the requested information, and then upload your paper.
- 2. All Session Chairs and Panelists are encouraged to submit Papers on their session topic, which will be posted in the GALIX Congress Program Summary and on the GALIX website (but this is not mandatory).
- 3. The "Call for Papers" is open to all Congress participants including those who are not giving presentations to submit papers on subjects addressed by the panelists.
- 4. These papers will be reviewed and if accepted will be published on the GALIX website. URL: GALIX.net.
- 5. Paper can be emailed to <u>info@galix.net</u> or submitted online. URL: galix.net. Please click on "GALIX Congress 2021". Then click on the "Call for Papers" menu button.
- 6. <u>Abstract Submission Deadline</u>: Mar 5<sup>th</sup>, 2021.

# **MARCH 18:** Video Greetings from Co-hosts 10:00-10:05 am EDT / 15:00-15:05 am CET

#### FIRST SESSION: The Future of Off-World Settlements: The Technical, Operational, Regulatory, Safety, and Environmental Challenges 10:05 to 11:05 am EDT / 15:05-16:05 pm CET



Session Chair: Jean-Jacques Tortora, Dir., European Space Policy Institute Panelist: Adriano Autino: Space Renaissance International Panelist: Alicia Woodly , Axiom Inc. Panelist: Dr. Madhu Thangavelu, Moon Village Association Panelist: Michelle Hanlon, Co-Founder – For All Moonkind

#### **Brief Biographies**

**Jean-Jacques Tortora** is the Director of the European Space Policy Institute in Vienna, Austria. This institute seeks to conduct research and identify and create new and useful regulatory space policies and law. This work is carried out in coordination with the U.N. Committee on the Peaceful Uses of Outer Space (COPUOS), as well as space agencies and other entities engaged in space law and policy around the world.

**Adriano Autino** is the President of Space Renaissance International (SRI), headquartered in Italy but with membership worldwide. SRI is advocating for global expansion of civilization into outer space through sustainable off-world settlements. SRI will also be holding its own 3<sup>rd</sup> World Congress (web-based) on Civilian Space Development in June of 2021.

**Alicia Woodly** is a staff member of Axion Space. This company is planning commercial missions in late 2021 to the International Space Station (ISS) and aims to own and operate the world's first commercial space station.

**Dr. Madhu Thangavelu**, is a leading official in the Moon Village Association and a faculty member in the School of Engineering at the University of Southern California and also on the faculty of the International Space University.

**Michelle Hanlon** is the co-founder the movement known as For All Moonkind. Its mission is to preserve historical sites on the Moon associated with the first lunar landings, and to develop an environmental consciousness/perspective with regard to human settlements in off-world locations.

#### <u>SECOND SESSION</u>: Threats to Earth from Asteroids and Solar Storms, and Consideration of Other Broader Aspects of Planetary Defense 11:05 am to 12.05 pm EDT / 16:05 to 17:05 pm CET



Session Chair: Dr. Joseph N. Pelton Dean Emeritus, International Space University Panelist: Dr. James Green, Chief Scientist of NASA Panelist: Dr. William Ailor, Technical Fellow with the Center for Orbital and Debris Reentry Studies, Aerospace Corporation Panelist: Dr. Olga Sokolova, Risk Analyst with Sirin Orbital Systems AG

#### **Brief Biographies**

**Dr. Joseph Pelton** is Director Emeritus, Space & Advanced Communications Research Institute (SACRI) at George Washington University & Former Dean, ISU. He was the founder of the Arthur C. Clarke Foundation, the organizer and first President of what is now known as the Space & Satellites Professionals International, and was Director of Strategic Policy of the Intelsat Organization. He is the author of over 50 book in the field of space systems and law

**Dr. James Green** is the chief scientist of NASA. He was previously the the Director of Planetary Sciences for NASA and prior to that head of Data Services at the Goddard Research Center.

**Dr. William Ailor** is a Technical Fellow with the Center for Orbital and Debris Re-entry Studies at the Aerospace Corporation. He has chaired eight international conferences focused on the threat to Earth from asteroids and comets.

**Dr. Olga Sokolova** is a Risk Analyst with Sirin Orbital Systems AG of Zurich, Switzerland and holds a Ph.D. from the St. Petersburg Polytechnic University. She has worked with a number of space insurance and reinsurance companies, and is an expert in space weather risk analysis.

#### <u>THIRD SESSION</u>: The Challenge of Global Space Education, Training and Capacity-Building 12:05-12:35 pm EDT / 17:05-17:35 pm CET



#### Session Chair: Niklas Hedman, Secretary of COPUOUS Panelist: Juan de Dalmau, President – International Space University Panelist: Dr. Su-Yin Tan, University of Waterloo – Canada

#### **Brief Biographies**

**Niklas Hedman** is Secretary of the U.N. Committee on the Peaceful Uses of Outer Space and Chief of Committee, Policy and Legal Affairs Section of the U.N. Office of Outer Space Affairs (OOSA). Among his many responsibilities he is responsible for within the OOSA for capacity-building in space law and policyt

**Juan de Daumau** is President of the International Space University (ISU) headquartered in Strasbourg, France. This specialized University offers a Masters in Space Studies and accelerated 9-week Space Study Programs around the world, as well as a 5-week Southern Hemisphere Program. Mr. Daumau was an official of the European Space Agency before assuming the role of President of the ISU.

**Dr. Su-Yin Tan** has taught all over the world in special international space studies program. She is Director of the Applied Geomatics Lab at the University of Waterloo. Her doctorate is from Cambridge University in the United Kingdom

# MARCH 19: Video Greetings from Co-hosts 10:00-10:05 am EDT / 15:00-15:05 am CET

**FIRST SESSION:** Innovative Legal, Financial, and Institutional Arrangements for International Space Collaboration 10.05-11:05 am EDT / 15:05-16:05 CET



Session Chair: Lucy Stojak, Executive Director, Mosaic – School of Management, HEC (Montreal, Canada) Panelist: Steven Freeland, Professor Emeritus and Former Dean, University of Western Sydney – Australia Panelist: Tanja Masson Zwaan, Dep. Director, International Institute of Air & Space Law – University of Leiden, The Netherlands

#### **Brief Biographies**

**Lucy Stojak** is Executive Director of Mosaic and Director, Summer School on Management of Creativity in an Innovation Society, HEC of Montreal, Canada. She has been a member of the Canadian delegation to international organizations such as the United Nations, the EU, the OECD, the Conference on Disarmament and the European Space Agency (ESA). She also serves as the Chair of the Canadian Space Advisory Board (SAB).

**Steven Freeland** is Professor at Western Sydney University, Australia specializing in Commercial Space Law, and previously the Dean of the School of Law. He 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 COPUOS meetings. He has been appointed by COPUOS to co-chair multilateral discussions on the exploration, exploitation and utilization of space resources at the forthcoming meeting of the COPUOS Legal Subcommittee.

**Tanja Masson-Zwaan** is Deputy Director of the International Institute of Air and Space Law at Leiden University, and President Emerita of the International Institute of Space Law (IISL). Tanja is member of a team of experts advising the Dutch government on the implementation of the Netherlands Space Activities Act.

#### <u>SECOND SESSION</u>: New Space Security Concerns: The Advent of Space Forces, the Need for Better Space Situational Awareness and Space Management and More 11:05 am-12:05pm (EDT) / 16:05 to 17:05 CET



Session Chair: Dr. Peter Martinez, Director of the Secure World Foundation Panelist: Kai -Uwe Schrogl, Chair, International Institute of Space Law Panelist: Theresa Hitchens, Senior Reporter, Breaking Defense Panelist: Prof. Sa'id Mosteshar, Director, London Institute of Space Policy and Law, School of Advanced Studies, University of London

#### **Brief Biographies**

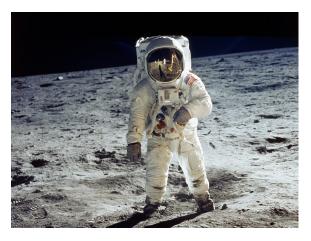
**Dr. Peter Martinez** is the Director of the Secure World Foundation. He is the former head of the South African Space Agency, and the former Professor and Head of the Space Labs program in the School of Engineering at Cape Town University. He served as the representative of the Republic of South Africa to U.N. COPUOS and Chaired its Working Group on the Longer Term Sustainability of Outer Space Activities.

**Prof. Dr. Kai-Uwe Schrogl** is the President of the International Institute of Space Law (IISL) since 2016. From 2014 to 2016, he was the Chair of the UNCOPUOS Legal Subcommittee. He is currently seconded from the European Space Agency ESA to the German Federal Ministry for Economic Affairs and Energy in Berlin to support the German Presidency of the Council of the European Union as of the second half of 2020. He leads the editorial team of the Handbook of Space Security in two volumes, published in 2nd edition at Springer.

**Theresa Hitchens** is a senior reporter for Breaking Defense. She is the former Director of the U.N. Institute for Disarmament Research. She also formerly served as a Senior Research Scholar for the Center for International and Security Studies, University of Maryland.

**Prof. Sa'id Mosteshar** is the Director of the London Institute of Space Policy and Law, School of Advanced Studies, University of London. Sa'id is a member of the Space Leadership Council, and of the UK delegation to the UN Committee on Peaceful Uses of Outer Space. He is a member of the International Institute of Space Law and a past Chairman of the Outer Space Law Committee of the International Bar Association.

#### <u>THIRD SESSION</u>: International Lunar Exploration Working Group - EuroMoonMars Astronautics Programme 12:05-12:35 (EDT) / 17:05-17:35 CET



Session Chair: Bernard Foing, Director - ILEWG & EuroMoonMars Panelist: Sabring Kerber, Space Architect & Analog Astronaut, EuroMoonMars Astronautics Programme Panelist: Dr. Roxana Perrier, IPSA Aerospace School/EuroMoonMars Panelist: Nancy Vermeulen, EuroMoonMars Astronautics Training Academy.

#### **Brief Biographies**

**Bernard Foing** is Executive Director of ILEWG International Lunar Exploration Working Group, manager of EuroMoonMars programme. Prof at VU Amsterdam/Leiden Observatory. He is vice-chair of COSPAR Commission B (Moon, planets and small bodies) and PEX Exploration panel, chair of IAF ITACCUS committee on Socio-Cultural Utilization of Space, and a member of IAF committees (exploration, habitats, astronomy, traffic management) and full member of IAA International Academy of Astronautics since 2010. Former President of ESTEC staff committee (2012-2017), Chief scientist and Lead Project Scientist of the ESA SMART-1 mission to the Moon.

**Sabrina Kerber** is a space architect from Technische Universität Wien, Co-Founder at Explaneta Space Solutions, and Communications Manager at EuroMoonMars. She also has been analog astronaut for EMMIHS campaign (EuroMoonMars-Intl MoonBase Alliance HI-SEAs) in 2019. She is member of IAF Space Habitats committee.

**Roxana Perrier** is a Space Science and Physics teacher at the IPSA AeroSpace engineering School, Toulouse, France. She is also a tutor for space related student projects, and an active member of EuroMoonMars working group, and served as commander in the EMMPOL Euro Moon Mars Poland simulation.

**Nancy Vermeulen** is an active member of ILEWG/EuroMoonMars Astronautics Training Academy (EMMATA) and the founder of the Space Training Academy where she prepares genuine space tourists and suborbital scientists for space travel.

#### <u>CONCLUDING SESSION</u>: Next Steps for the GALIX Space Alliance 12:05-12:35 EDT / 17:05-17:35 CET