

***Preliminary Program***  
(as of 4<sup>th</sup> February)

**3rd Manfred Lachs International Conference on**  
***NewSpace Commercialization and the Law***

**Organized by the**  
**Institute of Air and Space Law and**  
**Centre for Research in Air and Space Law**  
**Faculty of Law, McGill University, Montreal, Canada**

***Venue: Headquarters of the International Civil Aviation Organization***

**16 and 17 March 2015**

The term ‘NewSpace’ is commonly used within the industry, regulatory and policy circles pertaining to new commercial space endeavors, yet its precise definition is vague and does not appear to have been fully articulated. Although difficult to define, several themes appear to apply unequivocally to the NewSpace movement: disruptive technologies, entrepreneurship, privately held companies, individual access to and settlement of space and exploitation of space resources. Through innovative technologies and practices, new production techniques and new products, NewSpace resurrects unresolved legal issues and brings forth new legal challenges. By canvassing NewSpace endeavors, their technological developments and business initiatives, it will be possible to better understand the various legal challenges facing this nascent industry so as to initiate positive changes in law and policy and to appropriately address industry needs arising therefrom as well as protecting global public interest, public safety, environment and national and international security interests.

In order to comprehensively address these challenges, the 3<sup>rd</sup> Manfred Lachs Conference is organized as an international interdisciplinary on the theme of NewSpace Commercialization and the Law. The primary intent of this Conference is to provide an enabling environment for serious engagement and comprehensive deliberations to take place on all relevant aspects of NewSpace by representatives of all major stakeholders in the space sector acting in their personal or professional (as opposed to their official) capacities.

The Conference will feature presentations related to the state of the art in current and future NewSpace activities, and the challenges they represent in terms of space law, policy and regulation. Particularly, it will address the existing unresolved issues and problems, and those that need to be confronted within the current or next decade in order to allow a responsible use of space by all stakeholders while integrating and facilitating the rise of NewSpace activities.

The participants will discuss and critically analyze the current technical, economic, political, strategic, and legal challenges to the achievement of responsible commercialization of the NewSpace industry. The presentations of about 20 minutes duration will specifically address topics listed at the following sessions:

## **CONFERENCE PROGRAM COMMITTEE**

Jimena Blumenkron, ICAO, Canada  
Paul Dempsey, McGill-IASL, Canada  
Niklas Hedman, Office for Outer Space Affairs, UN Office at Vienna  
Ram Jakhu, McGill-IASL, Canada (Chair)  
Scott Madry, Global Space Institute, United States  
Yaw Nyampong, Pan-African University, Ethiopia  
Joseph Pelton, Arthur C. Clarke Foundation, United States  
Lucien Rapp, SIRIUS, France  
Tommaso Sgobba, IAASS, The Netherlands  
Michael Simpson, Secure World Foundation, United States  
Charles Stotler, McGill-IASL, United States  
Jinyuan Su, McGill-IASL and Xi'an Jiaotong University, China

## **SCHEDULE**

### **FIRST DAY: MONDAY 16 MARCH 2015**

#### **7:30 – 8:30 REGISTRATION**

#### **8:30 – 9:00 WELCOMING REMARKS**

1. Daniel Jutras (Faculty of Law, McGill University, Canada) (TBC)
2. Paul Dempsey (Institute of Air and Space Law, McGill University, Canada)
3. Ram Jakhu (Institute of Air and Space Law, McGill University, Canada)

#### **9:00 – 10:30**

##### **Co-Chairs: Joseph Pelton and Ram Jakhu**

##### **Session 1: Extension of Existing Services: Telecom, Space Navigation and Remote Sensing**

1. Audrey L. Allison (The Boeing Company, United States): *Accommodating New Commercial Space Applications in the Global Regulatory Framework: A Brief Look Ahead of the ITU's 2015 World Radiocommunication Conference*
2. Scott Madry (Global Space Institute, United States): *Future Policy, Legal, and Practical issues in Global Navigation Satellite Systems (GNSS)*

3. Mukund Rao (National Institute of Advanced Studies, India), K R Sridhara Murthi (NIAS) & Baldev Raj (NIAS): *“NewSpace” Emerging Perspectives for EO and GI Policy*
4. Sanat Kaul (International Foundation for Aviation, Aerospace & Development, India Chapter, India): *New Extension of Commercial Space Applications-Broadband, Information Communication Technology (ICT) and Geomatics*
5. Tare Brisibe (former Chairman of the Legal Sub-Committee of the UNCOPUOS): *A Decade of Convergence and Technology Acceleration in Non-safety Aeronautical Mobile-Satellite Communications*

**10:30 – 11:00 REFRESHMENT BREAK**

**11:00 – 12:30**

**Co-Chairs: Paul Dempsey and Tommaso Sgobba**

**Session 2: Space Transportation**

1. Richard Dalbello (Virgin Galactic, United States) (TBC)
2. Jimena Blumenkron, (ICAO, Canada) (TBC)
3. Joseph Pelton (Arthur C. Clarke Foundation, United States): *New Ways Forward in Protozone Regulation*
4. Taro Kuusiholma (Finnish Transport Safety Agency, Finland): *RPAS and High Altitude Platform Systems; New extensions of Air and Space providing possible ways to rethink and perceive unresolved NewSpace legal issues*
5. Neil Wolf (Law Offices of Neil G. Wolf, United States): *Organizing aerospace traffic management using ANSP programs and systems – is it possible?*

**12:30 – 14:00 LUNCH**

**14:00 – 15:30**

**Co-Chairs: Ram Jakhu and Niklas Hedman**

**Session 3A: Small Satellites**

1. Gokhan Inalhan (Istanbul Technical University, Faculty of Aeronautics and Aeronautics, Turkey), Kemal Yillikci (Permanent Mission of Turkey to ICAO), Kemal Nazim Ure (Massachusetts Institute of Technology, Department of Aeronautics and Astronautics, United States) & Emre Koyuncu (Istanbul Technical University, Faculty of Aeronautics and Aeronautics, Turkey): *The Future of Micro/Nano-Satellite Based Earth Observation and Communication Systems*
2. Rene Laufer (Baylor University, United States) and Scott Madry (Global Space Institute, United States): *topic TBC*
3. Mazlan Othman (former Director of UNOOSA, Malaysia): *topic TBC*
4. Lucien Rapp, Victor Dos Santos, Adriana Martin (Space Institute for Research on Innovative Uses of Satellites, France): *New Entrants Threatening Existing Firms in Space Industry: Would Satellite Miniaturization Be a “Disruptive Innovation”?*
5. Steven Freeland (University of West Sydney, Australia): *NewSpace, Small Satellites and Law: Finding a Balance between Innovation, a Changing Space Paradigm and Regulatory Control*
6. Michael Mineiro (Science and Technology Policy Institute, Washington D.C., United States): *Regulatory Uncertainty for Non-Traditional Commercial Space Activities*

**Co-Chairs: Steven Freeland and Jinyuan Su**

**Session 3B: Legal and Regulation Reforms to Respond to NewSpace Challenges**

1. Niklas Hedman (Office for Outer Space Affairs, UN Office at Vienna): *Developments in the work of COPUOS and role of OOSA*
2. Ram Jakhu (Institute of Air and Space Law, McGill University, Canada): *topic TBC*
3. George D. Kyriakopoulos (National and Kapodistrian University of Athens, Greece): *Positive Space Law and Privatization of Outer Space: Fundamental Antinomies*
4. Charles Stotler (Institute of Air and Space Law, McGill University, Canada): *What is “New Space”?*
5. Benjamyn Ian Scott (Institute of Air and Space Law, Leiden University, The Netherlands): *Suborbital Activities and the Need for Legal Reform*

**15:30 – 16:00 REFRESHMENT BREAK**

**16:00 – 17:30**

**Co-Chairs: Michael Simpson and Scott Madry**

**Session 4: Commercial Space Stations and Launches and Infrastructure for Trips to Outer Space**

1. Eric Dahlstrom (International Space University, France) (TBC)
2. Tommaso Sgobba (IAASS) & M. L. F Kerolle (Institute of Air and Space Law, Leiden University, The Netherlands): *Self-Regulation of Commercial Human Spaceflight Industry and Liability Issue*
3. Bob Richards (Moon Express, Canada) (TBC)

**SECOND DAY: TUESDAY 17 MARCH 2015**

**9:00 – 10:30**

**Co-Chairs: Tommaso Sgobba and Yaw Nyampong**

**Session 5: On-Orbit Servicing and Active Orbital Debris Removal**

1. Michael Simpson (Secure World Foundation, United States) & Christopher D. Johnson (Secure World Foundation, United States): *Transparency and Security Assurances for Commercial NewSpace On-Orbit Servicing*
2. Isabelle Rongier (IAASS): *French Space Law and Its Implementation*
3. Lauren Small-Pennefather (Canadian Space Agency, Canada) & Yu Takeuchi (JAXA, Japan): *Space debris removal as a first step to realising a legal framework for Space Traffic Management in outer space*
4. Jinyuan Su (Xi’an Jiaotong University, China; Institute of Air and Space Law, McGill University, Canada): *Active Debris Removal and Space Arms Control*

**10:30 – 11:00 REFRESHMENT BREAK**

**11:00 – 12:30**

**Co-Chairs: Tare Brisibe and Cassandra Steer**

**Session 6: Commercial Systems for Military**

1. Bhupendra Jasani (King’s College London, the United Kingdom): *Commercial Satellites for Military Purposes*

2. Duncan Blake (Australia) *Commercial Satellites for Military Purposes*
3. Marini de Livera (APIIT Law School, Sri Lanka): *The use of Satellites in the Eelam war of Sri Lanka (TBC)*
4. Farzaneh Sharafbafi (Human Resources Development & Training Center, Iran Air, Iran) & S. Mousavi (Tehran University, Iran): *Military Usage of Commercial Satellite Yes or No*
5. Olubukola Olugasa (University of Ottawa, Canada), Okezi Uwede-Meshack (Nigerian Law School, Nigeria) & Bologi Christiana Alli (Nigerian Law School, Nigeria): *Situating the Second Air Malaysia Crash within New Space Transportation Systems under Outer Space Law*

**12:30 – 14:00                    LUNCH**

**14:00 – 15:15**

**Co-Chairs: Mukund Rao and Bob Richards (TBC)**

**Session 7: Commercial Space Mining**

1. Paul B. Larsen (Georgetown University Law Center, United States): *Commercial Asteroid Mining*
2. Susan Willshire (Independent Attorney, United States): *Terrestrial Legal Considerations in Asteroid and Space Mining Activity Law and Policy Development*
3. Barbara Skardzińska (University of Warsaw, Faculty of Law, Poland): *The environmental liability in outer space mining*

**15:15 – 15:45                    REFRESHMENT BREAK**

**15:45 – 17:00**

**Co-Chairs: Isabelle Rongier and Lucien Rapp**

**Session 8A: Financial and Risk Management**

1. Andrea (Dipaolo) Johnstone (McGill University, Institute of Air and Space Law, Canada): *Risk Management in the Intermediate Frontier: Insurance for Sub-Orbital Flight and Hypersonic Intercontinental Transportation*
2. Nathan A. Johnson (University of Nebraska--Lincoln, United States): *NewSpace Tipping the Balance of Domestic Liability Regimes: A U.S. Perspective*
3. Irina Chernykh (Peoples' Friendship University of Russia, Russia): *International Legal Protection of Intellectual Properties Received during Development of Space Systems and Space Technologies*
4. Yaw Nyampong (Pan-African University, African Union Commission, Ethiopia): *The Role of Insurance in the Development and Commercialization of NewSpace Activities*

**Co-Chairs: Mazlan Othman and Sanat Kaul**

**Session 8B: Reports on NewSpace around the World**

1. Mukund Rao (National Institute of Advanced Studies, India), K R Sridhara Murthi (NIAS), Baldev Raj (NIAS) & K Kasturirangan (NIAS): *Future Indian (new)Space – Contours of a National Space Policy that Positions a New Public-Private Regime*
2. Ricky Lee (Globalex, Australia) (via Skype): *topic TBC*
3. Phetole Sekhula (The High Court of South Africa, South Africa): *The Regulation of Sub-Orbital Aeroplanes under South Africa Domestic Air and Space Laws: A Search for Consensus*
4. Kang Duan (China Great Wall Industry Corporation, China): *topic TBC*

5. Rosa Yazdannejat (MTN Irancell Head Office, Tehran, Iran) & Younes Allaghebandhosseini (University of Tehran, Iran): *Legal Framework Challenges Facing Developing Countries as New Customers of Commercial Space Applications*

**17:15 – 18:00**

**Moderator: Paul Dempsey**

**SESSION 9: Conference Wrap-up and Closing Roundtable**

(TBC: possibly Joseph Pelton, Niklas Hedman, Ram Jakhu, Steven Freeland, Michael Simpson, Tommaso Sgobba, Tare Brisibe, Mukund Rao, Isabelle Rongier, Lucien Rapp, Mazlan Othman and Sanat Kaul)

**Collaborating Institutions:**



[Astrosociology Research Institute \(ARI\), Huntington Beach, CA, USA](#)



[Canadian Space Commerce Association \(CSCA\), Scarborough, ON, Canada](#)



**China Institute of Space Law (CISL), Beijing, China**



[The Global Space Institute \(GSI\), Chapel Hill, North Carolina, United States](#)

# JAIN UNIVERSITY

Declared as Deemed-to-be University u/s 3 of the UGC Act 1956

[International Institution of Aerospace Engineering and Management \(IIAEM\), Jain University,  
Bangalore, India](#)



[International Association for the Advancement of Space Safety \(IAASS\), Noordwijk, The  
Netherlands](#)



[International Institute of Space Law \(IISL\), Paris, France](#)



[National Institute of Advanced Studies \(NIAS\), Bangalore, India](#)



[Secure World Foundation \(SWF\), Broomfield, CO, USA](#)



**Space Institute for Research on Innovative Uses of Satellites (SIRIUS), France**



[Space Policy, Elsevier, The United Kingdom](#)

**Space Policy Institute**

**THE GEORGE WASHINGTON UNIVERSITY**

[Space Policy Institute \(SPI\) \(Elliott School of International Affairs, The George Washington University\), Washington DC, USA](#)