The SIRIUS Talks conference is organized annually by the SIRIUS Chair - a business chair founded on a private-public partnership involving three leading operators in the global space sector (CNES, Airbus Defence & Space and Thales Alenia Space) and two respected higher education institutions (Toulouse Capitole 1 University and the Toulouse Business School). The conference aims to provide an opportunity for researchers working on legal, social, economic and managerial issues confronting space activities to share their work with academic and industrial communities in the space sector. With the theme "Space Economy: Urgent Need for New Global Regulation?", this year's conference includes four sessions with great keynote presentations on Space Traffic Management, Space Resource Exploitation, Space Insurance and Strategies, and Space Policy and Market investment. The conference is open to experts, industry representatives, early career managers, entrepreneurs, business and academia researchers and students, and other relevant stakeholders in the space community. The working language will be English.

Responsible

Lucien Rapp, *Professeur à l'Université Toulouse 1-Capitole, Directeur scientifique de la chaire SIRIUS.*

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Useful information

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SIRIUS
SPACE, BUSINESS & LAW

SPACE TALKS '18



Space Economy: Urgent Need for New Global Regulation?

Toulouse,
23 October 2018
Assembly Room of the Occitania Region
22 Boulevard du Maréchal Juin, 31400 Toulouse

INSCRIPTION EN LIGNE : http://**siriustalks2018.**sciencesconf.org/

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8 h 30 | **Check in**

9 h 00 | **Opening Remarks**
Michel Faup, *Sous-directeur Innovation et Prospective, CNES*

9 h 10 | **WORKSHOP 1 - SPACE TRAFFIC**
MODERATOR: Cédric Balty, *Thales Alenia Space*

PANELISTS:
Didier Alary, *Airbus, Toulouse, France (keynote speaker)*
François Raffenne, *Ariane Group, Paris, France (invited speaker)*
Denis Bousquet, *AXA Corporate, Paris, France (invited speaker)*

How to achieve the three-fold goals of effective Space Traffic Management (STM), enhancing Space Situational Awareness(SSA) and comprehensive approach to Active Debris Removal (ADR)? What are the challenges of the New Space Traffic? How to deal with the consequences of increasing space congestion in the next decade? Pay-now-or-pay-more-later traffic management? Where will the funding come from? Determining the models of governance and the responsible international body to ensure safety and security in space? Which legal framework can be applied to STM?

Questions and Discussion

10 h 40 | **Coffee break**

11 h 00 | **WORKSHOP 2 - SPACE RESOURCES**
MODERATOR: Lucien Rapp, *Univ. Toulouse1-Capitole, SIRIUS Chair*

PANELISTS:
Murielle Lafaye, *CNES, Toulouse France (keynote speaker)*
Vassilis Zervos, *ISU, Strasbourg, France (invited speaker, TBC)*
Christophe Bonnal, *CNES-DLA, Paris, France (invited speaker)*

Which resources to exploit? Is there any prospect for deep-space travel and habitat using space resources? Which of the triad will govern the use and property rights of resources: national law agendas, standards of conduct, or international treaties? What if national legislations do not comply with treaty principles? Is a consensus on space resource policy recognized by key space-faring parties possible? Or does such an "international regime" imply a rigid dictatorship denying sovereign rights? Has Outer Space become a "global commons"? How can the benefits from space resource be equitably shared? How are disputes over resources resolved?

Questions and Discussion

12 h 00 | **Lunch**

13 h 30 | **WORKSHOP 3 - SPACE POLICY**
MODERATOR: Bernard Andrau, *Airbus Defence&Space*

PANELISTS:
Lucy Stojak, *MOSAIC, HEC-Montreal, Montreal, Canada (keynote speaker)*
Sébastien Moranta, *European Space Policy Institute (ESPI), Vienna, Austria (keynote speaker)*
Frédéric Masson, *CNES DLA, Paris, France (invited speaker)*

In recent months, US space policy has been the subject of important decisions, marking an inflexion as compared to the orientations of the previous administration (Mars planet as a new frontier, premium given to the private sector, leadership of the Department of Commerce, presidential directives, a "Space Force" to be created, the US export control regime to be reviewed, nearly $ 1 billion raised by US start-ups in the first quarter of 2018). Is there a period of predominance for many years to come of the United States in the field of space activities? How to build one's own space policy, when one is a neighbor of and has a free trade agreement with the United States (Canada)? What place should there be for cooperation if gaps are widening on both sides of the Atlantic (Europe)?

Questions and Discussion

15 h 00 | **Coffee break**

15 h 20 | **WORKSHOP 4 - SPACE MARKET**
MODERATOR: Philippe Clerc, Alain de Boisesson, *CNES*

PANELISTS:
Diane Howard, *Embry-Riddle Aeronautical University, Daytona, USA (keynote speaker)*
Hamza Hameed, *UNIDROIT, Roma, Italy (invited speaker)*
Lucien Rapp, *SIRIUS, Toulouse, France (invited speaker)*

What are the safeguards for investors and astro-preneurs? Can investors work within or without existing space law? Do new private exploration markets require new laws? How to make space law more amenable to private investment and innovation? Is there a favourable legal regime? Are property rights without sovereignty possible? Or limited property rights instead? Are these legal structures adequate for investors? Can functional property rights be claimed? What is the scope of property rights in space? Are the days of OuterSpace monopolies counted? Which NewSpace companies, business-cases and start-ups drive the commoditization, commercialization and monetization of space? How to monetize and commercialize Space beyond Expeditions and Research? Which features of the space industry allow for the creation of unique opportunities for entrepreneurial growth? What are the challenges to aerospace entrepreneurship?

Questions and Discussion

17 h 00 | **Closing remarks**
Lucien Rapp, *SIRIUS*