

SPACE POLICY & LAW COURSE
23 TO 25 OCTOBER 2023

ON-LINE

MONDAY 23 OCTOBER 2023*

1. SPACE ENVIRONMENT AND TECHNOLOGY – 09.15 - 10.30* JE
- Delimitation of Space and Airspace
 - Environmental characteristics
 - Orbits, types of spacecraft, mega-constellations
 - Discussion and questions MS & DS
- BREAK – 10.30 - 10.45
2. POLICY FORMULATION AND INSTITUTIONS – 10.45 - 12.00 ACT
- Policy Principles, Peaceful Use, Non-appropriation, Cooperation and Non-interference
 - Policy development, institutions and diplomacy
 - International and National Institutions - nature and role
 - UN COPUOS, ESA, Regional Organisations and operating methods
 - National Policies, formulation and implementation
 - Discussion and questions DS & GT
- LUNCH – 12.00 - 13.00
3. THE LEGAL REGIME – 13.00 - 14.15 PJB
- Sources of Space Law, Outer Space Treaties, UN Resolutions
 - Other regimes - Antarctic, Law of the Sea and Air Law
 - International Responsibility and Liability distinguished
 - National space laws and Licensing
 - Norms, Practices, Guidelines, Regulations and Standards
 - Discussion and questions OS & TvB
- BREAK – 14.15 - 14.30
4. THE LAWS GOVERNING SPACE APPLICATIONS – 14.30 - 15.45 FT
- Sovereignty, Property Rights
 - Earth Observation: Data v. Information; UN Principles; Disaster Charter
 - Scientific experiment, Exploration and Exploitation
 - Manned and Robotic activities: ISS; Chinese Space Station
 - Lunar and Planetary Stations
 - Discussion and questions OS & IZ
- BREAK – 15.45 - 16.00

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5. SPACE POLITICS AND DIPLOMACY – 16.00 - 17.15 HLM
- EU and ESA Relationship
 - UK ESA and EU Relationship
 - Space Powers Mid-century, China, EU, India, Japan, Russia, US
 - Discussion and questions
- RK & SA
- TUESDAY 24 OCTOBER 2023***
6. COMMERCIAL SPACE ACTIVITIES – 09.15 - 10.30* LR
- Nature and range of commercial space ventures
 - PNT Applications and Services
 - Spaceflight and Spaceports
 - Small Satellite Mega-constellations
 - On-orbit Servicing
 - Regulation, Market Access
 - Recovery and Return
 - Active Debris Removal
 - Discussion and questions
- LJS & MR
- BREAK – 10.30 - 10.45
7. RISK, LIABILITY AND INSURANCE – 10.45 - 12.00 AS
- Laws Governing Liability (Risk and Fault)
 - Liability for Debris and Obligation not to Create, SDA
 - Active Debris Removal - Remediation vs Mitigation
 - Insurance
 - Discussion and questions
- TM-Z
- LUNCH – 12.00 - 13.00
8. CURRENT AND FUTURE DEVELOPMENTS – 13.00 - 14.15 TvB & SM
- Large Constellations
 - Extra-terrestrial habitation
 - Resource Extraction (Private & State participation, property rights, appropriation and the issue of territory vs. resources, and other concepts)
 - Space-based Solar Power
 - Artificial Intelligence and autonomous systems
 - Discussion and questions
- J-JD & GT
- BREAK – 14.15 - 14.30
9. SATELLITE COMMUNICATIONS – 14.30 - 15.45 LR
- Telecommunications and Broadcasting: The Role of the ITU
 - Orbital Positions, Co-ordination
 - Spectrum management: Frequency Efficiency and Market Reach
 - Harmful interference, jamming, signal interception, cyber security
 - Frequency priority, EU and the ITU
 - Discussion and questions
- EQ & AM
- BREAK – 15.45 - 16.00

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10. MILITARY AND SECURITY USES – 16.00 - 17.15 JG
- Military support functions and Space Weapons
 - Space a "war-fighting" domain
 - Role of Cyber, Drones and Robotics
 - Consequences of AI
 - Environmental and humanitarian factors
 - Small Satellite Constellations potential and risks
 - Discussion and questions JS & TvB
- WEDNESDAY 25 OCTOBER 2023***
11. SPACE HAZARDS AND SAFETY – 09.15 - 10.30* RC
- Space hazards - Man made and natural: Meteorites, Debris
 - Debris Reduction and Elimination Measures
 - Responsible Behaviour, Transparency and Confidence Building Measures
 - Discussion and questions SE
- BREAK – 10.30 - 10.45
12. SPACE HAZARDS AND SAFETY – 10.45 - 12.00 SE
- Space Domain Awareness and Space Traffic Management
 - Space Weather
 - Terrestrial environmental impact
 - Discussion and questions RC
- LUNCH – 12.00 - 13.00
13. CASE STUDIES – 13.00 - 14.15 SM
- Recovery and Return
 - Debris (liability, sovereignty, space domain awareness and other concepts)
 - Resource Extraction (Private & State participation, property rights, potential pollution from space, appropriation and the issue of territory vs. resources, and other concepts)
 - Active Debris Removal
 - Responsible Behaviour in Outer Space
- BREAK – 14.15 - 14.30
14. REVIEW & CONCLUSION – 14.30 - 15.45 SM
- Course Summary, Discussion and conclusion

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LECTURERS

ACT	Dr Adriana Cursino Thomé, Technical Adviser, Ministry of Science, Tech'y and Innovation, Brazil
AS	Alexander Soucek, Head, International Law Division, ESA
FT	Dr Fabio Tronchetti, Associate Professor, Law School, Northumbria University
HLM	H Ludwig Moeller, Director, European Space Policy Institute (ESPI)
JE	Dr Jonathan Eastwood, Director, Space Lab, Imperial College London
JG	Prof Maj Jeremy Grunert, US Air Force Academy; Mississippi Univ. Air & Space Law Centre
LR	Prof Lucien Rapp, School of Law, Toulouse1-Capitole Univ; Chair, SIRIUS; ISPL Faculty
PJB	Prof PJ Blount, Lecturer, Cardiff Univ; Adj. Prof, Mississippi Univ, Air & Space Law; ISPL Faculty
RC	Prof Richard Crowther, Technical Adviser for Orbital Space, CAA; ISPL Faculty & Adviser
SE	Dr Stuart Eves, Pincipal, SJE Space; ISPL Faculty
SM	Prof Sa'id Mosteshar, Barrister; Senior Associate Research Fellow, IALS; ISPL Director
TvB	Tsvetelina van Benthem, Int'l Law Lec'r and Res'r; DPhil Candidate, Merton College, Oxford University

DISCUSSANTS

AM	Attila Matas, Satellite Orbit and Spectrum Consultant, Former Head, Space Public'n & Regist'n, ITU
CB	Dr Christoph Beischl, ISPL Associate Deputy Director
DS	Prof David Southwood, past Chairman, Steering Board, UK Space Agency; ISPL Board
EQ	Elizabeth Quintana, Principal, Satellite Industry Engagement, Ofcom
GT	Dr Graham Turnock, Snr Advisor Organisational Develop't, ESA; Former UKSA CEO; ISPL Faculty
IZ	Ilaria Zilioli, Legal Officer, ESA; ISPL Faculty
J-JD	Prof Jean-Jacques Dordain, CNES; past ESA Director-General; ISPL Faculty & Adviser
JS	Juliana Suess, Research Analyst, Military Sciences, Royal United Services Institute RUSI
LJS	Prof Lesley Jane Smith, Partner, Weber-Steinhaus & Smith; ISPL Faculty
MR	Air Commodore (Ret'd) Mark Roberts, Defence & Security, RHEA Group; ISPL Faculty
MS	Prof Sir Martin Sweeting, Executive Chairman, Surrey Satellite Technology; ISPL Board
OS	Oonagh Sands, Counsel, Fietta Law; ISPL Faculty
RK	Dr Ranjana Kaul, Partner, Dua Associates; ISPL Faculty
SA	Prof Setsuko Aoki, Faculty of Management, Keio Univ; ISPL Faculty
TM-Z	Prof Dr Tanja Masson-Zwaan, Depy Director, IIASL, Leiden Univ; Pres Emerita, IISL; ISPL Faculty

The Discussants will join the discussion as the occasion arises.