

Space capacity allocation for the sustainability of space activities

Tuesday, 6 June 2023

Presentations session: Long-term space debris simulation and metrics - Beltrami - Building 5 (10:15 - 11:00)

time	[id] title	presenter
10:15	[26] Space debris, are we doing enough?	ROSSI, Alessandro
10:30	[27] Impacts of Thermosphere Contraction on Debris Accumulation and Orbital Capacity	PARKER, William
10:45	[28] Forecasting Resident Space Object Populations through a Calibrated Source-sink Evolutionary Model and a Machine-learning Algorithm	MACHUCA, Pablo

Presentations session: Long-term space debris simulation and metrics - Beltrami - Building 5 (11:15 - 12:45)

time	[id] title	presenter
11:15	[22] Assessment of the long-term effect of large constellations on the space debris environment through the Starling2.0 evolutionary model	GIUDICI, Lorenzo
11:30	[29] Finding the Upper Threshold of LEO Activity That Makes Long-Term Space Operations Unsustainable	SORGE, Marlon
11:45	[31] Social benefits assessment of Earth observation missions through the Sustainable Development Goals 2030	NUGNES, Marco
12:00	[32] Assessing near-Earth space sustainability using networks	ROMANO, Matteo
12:15	[33] Studying the impact of large constellations on the space environment using a space debris metric	MUCIACCIA, Andrea
12:30	[34] Quantifying Satellite Impacts on the Space Debris Environment using Density Distribution Metrics in Specific Orbital Angular Momentum Space	DORRINGTON, Scott

Presentations session: Long-term space debris simulation and metrics - Beltrami - Building 5 (14:00 - 14:45)

time	[id] title	presenter
14:00	[39] Risk of collision during launch phase	MACAIRE, Alexis
14:15	[40] Dynamic Orbital Risk and Safety Assessments in a Changing Space Debris Environment	Mr MCNALLY, Keiran
14:30	[38] Comparing active debris removal effectiveness in LEO using a normalised effective reduction factor	SOMMA, Gian Luigi

Wednesday, 7 June 2023

Presentations session: Space capacity allocation and space traffic management - De Donato - Building 3 (09:05 - 10:50)

time	[id] title	presenter
09:05	[41] ESA's approach to Space Environment Capacity	Dr LETIZIA, Francesca
09:20	[42] Modeling Empirical Orbital Capacity	MCKNIGHT, Darren
09:35	[43] How should small debris be treated in "Space capacity"?	KITAZAWA, YUKIHITO
09:50	[44] THEMIS Space debris index for the assessment of the capacity of the overall environment	COLOMBO, Camilla
10:05	[45] Monitoring evolution of the satellite conjunction network	RAO, Akhil
10:20	[59] From Space Operations to Space Traffic Management	CARDELLICCHIO, Andrea
10:35	[46] Australia's approach to sustainable space activities: the Space Sustainability Framework	LE PELLECC, Marie

Presentations session: Space capacity allocation and space traffic management - De Donato - Building 3 (14:00 - 15:15)

time	[id] title	presenter
14:00	[47] DECISION SUPPORT SYSTEM FOR SPACE COLLISION AVOIDANCE USING THE ENVIRONMENT-VULNERABILITY-DECISION-TECHNOLOGY FRAMEWORK	ES HAGHI, Sina
14:15	[48] Proposals for Sustainable Space Development: Economic and Environmental Impacts	ABO SEIDA, Hasan
14:30	[49] Dynamical Characterization of Endogenous Conjunctions within the Starlink Constellation	CHEN, Sui
14:45	[50] Exploring the Carrying Capacity of Low Earth Orbit: Lessons from Terrestrial Resource Management	DONOHEW, Zack
15:00	[51] Adaptive Management and Adaptive Governance for Orbital Capacity	LIFSON, Miles

Thursday, 8 June 2023

Presentations session: Policy and economic of space debris - Rogers - Building 11 (09:05 - 10:20)

time	[id] title	presenter
09:05	[52] Regulator and Policymaker Views on the Utility of Orbital Carrying Capacity	CHRISTENSEN, Ian
09:20	[53] International regulation of space debris on celestial bodies	MILANOV, Aleksandar
09:35	[54] ESA's Zero Debris Policy	LEMMENS, Stijn
09:50	[56] An application of a debris index and its complementarity with standard compliance-based approach: the Space Sustainability Rating	Mr SAADA, Adrien
10:05	[57] Comparing the equitability of various regulatory metrics for space debris management	LINDSAY, Michael