2021 Clean Space Industrial Days

Tuesday 21 September 2021

Debris removal and servicing: In-Orbit Servicing: missions & preparation (09:30 - 11:00)

time	[id] title	presenter
09:30	[130] A definition of In-Orbit Servicing presented by ESA	WOLAHAN, Andrew
09:45	[131] ADRIOS/ClearSpace-1: Overview and Status	RICHARD-NOCA, Muriel
10:00	[132] ELSA-d: Mission design and performance to date	WOKES, Stephen
10:15	[97] ACTIVE DEBRIS RECOVERY SYSTEM FOR LEO COMMUNICATIONS MISSIONS	ATAPUERCA RODRÍGUEZ DE DIOS, Francisco Javier
10:30	[114] Deorbit Kits as a Building Block of a Space Servicing and Logistics Infrastructure	ANTONETTI, Stefano

Debris removal and servicing: In-Orbit Servicing: missions & preparation (11:30 - 13:00)

time	[id] title	presenter
11:30	[133] Presentation of the Request for Information for In-Orbit Servicing	CAIAZZO, Antonio
11:45	[67] Airbus's vision for In-Orbit Servicing	FERREIRA, Eugenio
12:00	[62] The future of In-Orbit Servicing	ANDIAPPANE, Sabrina
12:15	[120] In-Orbit Services: AVIO vision. "1 or more Payloads up, 1 or more Services, 1 or more Payloads down for each mission"	Mr GASBARRINI, Giorgio
12:30	[166] OHB's vision for In-Orbit Servicing	BONERBA, Michele

Debris removal and servicing: IODs for In-Orbit Servicing (14:00 - 16:00)

time	[id] title	presenter
14:00	[71] PERIOD – PERASPERA In-Orbit Demonstrator for validating core on-orbit manufacturing, assembly and servicing operations	ESTABLE, Stéphane
14:15	[89] The e.Inspector mission phase A results and technology challenges	LAVAGNA, Michelle
14:30	[112] Autonomy and Software-Defined Distributed Architectures as Foundations for In-Orbit Servicing	Mr CHECHILE, Ignacio Ms NEHA, Chohan Mr SAVEDA SUVANAM, Sethu
14:45	[85] Building autonomy in space: a prototyping platform for autonomous space missions	Mr PROKOPAS, Arūnas
15:00	[121] Initial user-driven framework for developing trade-off scenarios for space debris removal services	Dr ALEXANDROVA, Stella

Wednesday 22 September 2021

Debris removal and servicing: Feared events of CPO for IOS missions (10:00 - 10:30)

time	[id] title	presenter
10:00	[171] Feared events of CPO for IOS missions	BIESBROEK, Robin

Debris removal and servicing: Technologies for Servicer Vehicles: Robotics (11:30 - 13:00)

time	[id] title	presenter
11:30	[136] European Robotics for In-orbit Servicing Manufacturing and Assembly	VISENTIN, Gianfranco
11:40	[68] Active debris removal by shape memory polymer composite devices	SANTO, Loredana
12:00	[98] STAARK robotic arm for in-orbit robotic missions	Mr RICARDO PATRICIO, Ricardo
12:20	[76] CAPTURE SYSTEM FOR SERVICING AND DEBRIS REMOVAL (CRUSSADER)	Mr IGLESIAS, Angel
12:40	[161] Drone-Catcher: Non-destructive drones capture and retrieve	LANDINI, Alberto

Debris removal and servicing: Technologies for Servicer Vehicles: GNC (14:00 - 15:40)

time	[id] title	presenter
14:00	[137] Vision-Based Navigation sensors for Debris Removal	SANCHEZ GESTIDO, Manuel
14:20	[90] Uncooperative Objects Effective Imaging through Flexible Flyaround Guidance	BRANDONISIO, Andrea
14:40	[119] Assessment and comparison of conditions in vacuum with experiments in open air of thermal infrared cameras for use in Debris Removal	Mr SOMOSVÁRI, Béla Márton
15:00	[162] A robust and high performance multi-spectral camera system for visual based navigation with applications in Debris Removal and On-Orbit Servicing	Dr FOGLIA MANZILLO, Pierluigi
15:20	[103] Multispectral imaging to support close proximity navigation and target mapping	CIVARDI, Gaia Letizia

Debris removal and servicing: Technologies for Servicer Vehicles: GNC (16:00 - 17:30)

time	[id] title	presenter
16:00	[99] GNC Sensors for in Orbit Servicing Missions	Mr WAGNER, Lars
16:20	[52] GNC and Autonomy Perspectives on Orbit Servicing, Assembly and Active Debris Removal	Dr LOURENÇO, Pedro
16:40	[91] AI-aided Guidance and Navigation for Dynamics Reconstruction of Uncooperative Spacecraft	SILVESTRINI, Stefano
17:00	[163] IOSHEXA: a hybrid payload adapter/spacecraft for in-orbit servicing	GUERZONI, Marco
17:20	[138] Real-time image rendering for simulation of thermal infrared cameras with application in Space Debris Removal	MARTIN, Iain

Thursday 23 September 2021

Debris removal and servicing: IOS Enabling Technologies - OMAR (14:00 - 15:30)

time	[id] title	presenter
14:00	[142] Presentation of OMAR	CAIAZZO, Antonio
14:10	[80] OMAR Mission Architecture Study	GANZER, Britta
14:40	[117] On-orbit Servicing Satellite study	SCHAEFFER, Nicolas
15:10	[106] A Fully-Modular Coupling Kit Enabling OMAR and Beyond: The intelligent Space System Interface iSSI® by iBOSS	Mr KREISEL, Joerg

Debris removal and servicing: On-Orbit Manufacturing (16:00 - 17:40)

time	[id] title	presenter
16:00	[147] Manufacturing in space for future sustainable space activities: drivers and perspectives	Dr MAKAYA, Advenit
16:10	[75] Feasibility Study of Large-format, Freeform 3D Printing for On-orbit Additive Manufacturing	Mr JONCKERS, Declan
16:40	[104] The ForgeStar: A Fully Returnable In-Space Manufacturing Platform	Mr BACON, Andrew
17:10	[116] PRELIMINARY DESIGN OF ON-ORBIT MANUFACTURING OF LARGE ANTENNA REFLECTORS	CAUJOLLE, Romain

Friday 24 September 2021

Debris removal and servicing: Design for Removal (09:30 - 11:35)

time	[id] title	presenter
09:30	[143] Design for Removal: an ESA definition	SOARES, Tiago
09:55	[82] Markers Supporting Navigation	SZEGEDI, Laszlo
10:20	[79] MICE - Mechanical Interface for Capture at End-Of-Life. Design and Testing up to TRL-6	GANDIA, Fernando CAMAÑES, Carmen RODRÍGUEZ REINA, Andrés SARD, Íñigo
10:45	[144] Passive Magnetic Detumbling of non-operational satellites in LEO to enable Active Debris Removal	BENOIT, Alain KORNIENKO, Andrey Mr KOWALTSCHEK, Steeve SOARES, Tiago
11:10	[169] Spacecraft passive detumbling with MTB at end of life	RAMIO TOMAS , Laia