



# Clean Space Industrial Days & AeroThermoDynamics Design for Demise Workshop

## Tuesday, October 24, 2017

### e.Deorbit: System - High Bay (11:30 AM - 1:00 PM)

time	[id] title	presenter
11:30 AM	[52] e.Deorbit & SSV	Mr BIESBROEK, Robin
11:50 AM	[53] Results of the Airbus DS led e.Deorbit Phase B1 ESA study	Dr ESTABLE, Stéphane
12:10 PM	[56] Space Debris Attitude Motion Measurements and Modelling, ENVISAT Case	SILHA, Jiri
12:30 PM	[59] Final Pre-Flight Update for the Remove Debris ADR Mission	FORSHAW, Jason

### e.Deorbit: Space Servicing Vehicle - Erasmus building (2:00 PM - 3:30 PM)

time	[id] title	presenter
2:00 PM	[54] Space Transportation Bus: An opportunity for new possibilities of Space Exploitation or Space Tug	Mrs BILLOT, carole
2:20 PM	[57] Space Tug	Mr PROFFE, Gerrit SCHEPER, Marc
2:40 PM	[55] Space Utility vehicle	FERREIRA, Eugenio
3:00 PM	[58] Utilising the Space Drone spacecraft for ADR	Ms LINN BARNETT, Danna

### e.Deorbit: GNC - Erasmus building (4:00 PM - 6:00 PM)

time	[id] title	presenter
4:00 PM	[60] ESA GNC Technologies and Test Beds for ADR and Space Tug Applications	Dr ORTEGA, Guillermo
4:20 PM	[61] On-ground testing of vision-based navigation for non-cooperative rendezvous targets using cameras in the visible and thermal infrared range	SANCHEZ GESTIDO, Manuel
4:40 PM	[62] Investigation of Detumbling Techniques	GANDIA, Fernando
5:00 PM	[63] COMRADE	GANDÍA ABELLÁN, Fernando
5:20 PM	[64] HIPNOS: High Performance Avionics Solution for Advanced and Complex GNC Systems for ADR	Mr GONZALEZ-ARJONA, David

## Wednesday, October 25, 2017

### e.Deorbit: GNC - Erasmus building (9:30 AM - 11:30 AM)

time	[id] title	presenter
9:30 AM	[96] Technology building blocks and ongoing activities regarding spectral sensing for relative navigation	Dr ESPOSITO, Marco
9:50 AM	[97] The RVS3000 and the RVS 3000-3D LIDAR Sensors: Recent Technological Advances and Future Applications	KOLB, Florian
10:10 AM	[98] ORCO: End-to-end On Ground System Validation of combined technologies for Debris Removal	GANDÍA ABELLÁN, Fernando
10:30 AM	[99] VIMANCO: Vision Manipulation of non-cooperative objects	PAPANTONIOU, Vassilios
10:50 AM	[100] Using Infrared-base relative navigation for Active Debris Removal	YILMAZ, Özgün
11:10 AM	[101] Navigation on a chip	KOLB, Florian

### e.Deorbit: Robotics - Erasmus building (11:50 AM - 1:10 PM)

time	[id] title	presenter
11:50 AM	[102] ESA Robotics for ADR and Space Tug Applications	VISENTIN, Gianfranco
12:10 PM	[103] Development of a gripper and the associated MGSE equipment	Mr JAWORSKI, Jaroslaw
12:30 PM	[104] PREDATOR : ENVISAT capturing strategy using a STEWART platform based gripper	SKEVAKIS, Stelios
12:50 PM	[105] Using a plenoptic camera for vision based navigation in an Active Debris Removal scenario	LÜKE, Jonas Philipp

### e.Deorbit: Robotics - Erasmus building (2:00 PM - 3:30 PM)

time	[id] title	presenter
2:00 PM	[106] Pre-Development of a Clamping Mechanism	Mr SARD, Iñigo
2:20 PM	[107] Design and Performance Analysis of the DLR robot manipulator arm for the e.Deorbit mission	LAMPARIELLO, Roberto
2:40 PM	[108] Validation Methodology of the Rendezvous and Grasping Maneuver on the Planar Air-Bearing Microgravity Simulator	Dr SEWERYN, Karol
3:00 PM	[109] ASSIST	MORA, Dario

### e.Deorbit: Flexible - High Bay (4:00 PM - 6:00 PM)

time	[id] title	presenter
4:00 PM	[35] Tethered-tugs dynamics and control verification and models validation by 0g experiments on parabolic flights	Prof. LAVAGNA, Michelle
4:20 PM	[36] Design and Dynamic Testing of Tether System as Active Capture Technology for e.Deorbit and Net/Harpoon Based Missions	Dr MARCONI, Lorenzo
4:40 PM	[110] ISS SPHERES Tether Dynamics Experiments / Evaluation of Tethered Active Debris Removal Issues	Mr BECKER, Marcel

5:00 PM	[111] Full Scale Demonstration of Debris Capturing with Deployable Nets	GOLEBIOWSKI, Wojciech
5:20 PM	[112] PATENDER: A Net-Based Experiment and Possible Solution to the Space Debris Problem	CERCOS, Lorenzo

# Thursday, October 26, 2017

## **e.Deorbit: ESA Robotics / Lab Tours - High Bay (9:00 AM - 11:00 AM)**

### **e.Deorbit: e.Inspector - High Bay (11:30 AM - 1:00 PM)**

time	[id] title	presenter
11:30 AM	[137] e.Inspector - a cubesat inspection mission	Ms MORALES SERRANO, Sara
11:40 AM	[138] Inspection trajectories and GNC design	Mr REINTHAL, Eric Dr GIL, Jesus
12:00 PM	[139] High thrust chemical propulsion for small satellites	KNOP, Tobias
12:20 PM	[140] Efficient De-Orbiting of Micro and Nano Satellites Using the IFM Nano-Thruster	Mr REISSNER, Alexander
12:40 PM	[152] Nanosat propulsion systems	DE GROOT, Zeger

### **e.Deorbit: Mega Constellations - High Bay (2:00 PM - 3:00 PM)**

time	[id] title	presenter
2:00 PM	[141] Mega Constellations EOL operations	SYMONDS, Kate
2:20 PM	[142] Active Debris Removal: A possible solution for megaconstellations	Mrs BILLOT, carole
2:40 PM	[143] Design for Removal: A cost efficient opportunity to prepare future satellites to an an ADR mission	Mrs BILLOT, carole