

**Session 1, 12 April, Chair Joris Melkert**

Time	First author		University	Title
16.00	Anthyme	Durlin	ELISA Aerospace	Model-Free Control Applied To The Longitudinal Movement Of An Aircraft
16.30	Dario	Ruggiero	Politecnico di Torino	Robust attitude controller for NASA Astrobees robots operating in the ISS
17.00	Inmaculada	Armengol Moreno	Universidad de Seville	Big data applied to predictive maintenance of aircraft tires
17.30	Ana	Alcaide Nielfa	Universidad de Seville	Autonomous Taxiing for Aircraft

**Session 2, 12 April, Chair Emmanuel Zenou**

Time	First author		University	Title
16.00	Claudio	Miccoli	Politecnico di Torino	Detailed Modelling of Cork-Phenolic Ablators in Preparation to the Post-Flight Analysis of the QARMAN Re-Entry CubeSat
16.30	Marco	Cinque	Federico II of Naples	Lamb-waves experimental-numerical correlation on a composite panel
17.00	Andrea	di Meo	Federico II of Naples	Development of software modules for preliminary design and structural optimization of hybrid-electric aircraft
17.30	Giovanna	Fusco	Federico II of Naples	Evaluation of the Biomechanical Responses during an Aircraft Emergency Landing

**Session 3, 13 April, Chair Joris Melkert**

Time	First author		University	Title
16.00	Stefano	De Santi	Politecnico di Torino	Missions towards Near-Earth Asteroids with Departure from Lagrangian Points L4 and L5
16.30	Andrea	Magnanini	Universita di Bologna	Estimation of the ephemerides and gravity fields of the Galilean moons through orbit determination of the JUICE mission
17.00	Antonio	Arcos Rueda	Universidad Politécnica de Madrid	Performance analysis of orbit determination algorithms for Space Surveillance and Tracking in LEO
17.30	Ignacio	Acedo Isac	Universidad Politécnica de Madrid	A Trajectory Generation Function for a Rendezvous Guidance Expert

**Session 4, 13 April, Chair Emmanuel Zenou**

Time	First author		University	Title
16.00	Elisa	Carli	ISAE-SUPAERO	Performance enhancement of space borne scatterometers by means of digital beamforming techniques
16.30	Manuele	Dassie	ISAE-SUPAERO	Relativistic Modelling for Highly Precise Ranging and Time Transfer via Optical Inter-Satellite Links
17.00	Roberto	del Prete	Federico II of Naples	A Novel Visual-Based Terrain Relative Navigation System for planetary applications based on Mask R-CNN and Projective Invariants Framework
17.30	Irene	Ziccardi	Sapienza University of Rome	Autonomous navigation of interplanetary probes by using sequential algorithm

**Session 5, 14 April, Chair Joris Melkert**

Time	First author		University	Title
16.00	Jose Felix	Zapata Usandivaras	ISAE-SUPAERO	Applicability of radiation modelling for direct comparison of simulations with experiment
16.30	Enrico	Majorana	Universita di Bologna	Development of a plasma chemistry model for Helicon Plasma Thruster analysis
17.00	Alba	Dominguez Gonzales	Universidad Politécnic de Madrid	Study of the influence of the Mars 2020 rover mast on the measurements recorded by the wind sensors
17.30	Paolo Maria	Zolla	Sapienza University of Rome	A Computational Tool for the Design of Hybrid Rockets

**Session 6, 14 April, Chair Emmanuel Zenou**

Time	First author		University	Title
16.00	Johannes	Berger	Universität Stuttgart	Scaling of an Aviation Hydrogen Micromix Injector Design for Industrial GT Combustion Applications
16.30	Juan Luis	González Montes	Universidad de Seville	Exergy Analysis of Hybrid-Electric Turbofan Concepts
17.00	Jordan	White	University of Glasgow	Investigation Of The Effects Of Geometry Tip Devices On Turbine Tip Leakage
17.30	Federico	Deprati	Sapienza University of Rome	Direct Numerical Simulation of flow and heat transfer in complex ducts