

2 May 2024 - Schedule

Session 1 - ML 205 - 11:00 AM-12:30 PM :

GROUP 2/1: Kıymet Yıldır (with Ayten Pamuk)

THESIS: Autonomous optical and inertial navigation of a realistic solar-sail propelled CubeSat class spacecraft targeting orbits around Mars

GROUP 2/2: Doğukan Coşkun, Elif Gökyolcu, and Hayriye Memiş

THESIS: Proof-of-concept of a realistic solar-sail propelled CubeSat class spacecraft

digital twin targeting orbits around Mars and its moons

GROUP 3: Bora Atakan, Muratcan Yurttaş, and Sila Simay Mumcuoğlu

THESIS: Trajectory design and flight dynamics of a realistic solar-sail propelled

CubeSat class spacecraft targeting orbits around Mars and its moons

PRESENTATION 1: Cengiz Yıldırım (IUE)

Planetary ephemerides computation with the leapfrog method. Comparisons with Horizons at NASA/JPL

PRESENTATION 2: Michal Hecka (Erasmus student)

Satellite telemetry via TinyGS, the Open Source Global Satellite Network

PRESENTATION 3: Michal Hecka (Erasmus student)

Reverse engineering digital design of LightSail 2 and its use in Augmented Reality (AR)

Session 2 - ML 205 - 16:00 PM-18:00 PM :

Open to all students with access to the SmallSat Design and Simulation Laboratory and other students interested in mission control and telemetry software. Andrew Henry, Technical Lead at NASA Ames Research Center) will be on Zoom from California, Jay Trimble will be in ML-205 with the rest of the audience. We shall discuss practical steps to include Open MCT in our theses and other projects, and potential collaboration opportunities towards use and improvement of this powerful free open source software (FOSS) package (<https://nasa.github.io/openmct/>).