

# Special Issue

## Optimal Control in Astrodynamics

### Message from the Guest Editors

The objective of this Special Issue entitled “Optimal Control in Astrodynamics” is in presenting valuable contributions in the field of optimal control applied to spacecraft dynamics, with a special focus on orbital mechanics and attitude dynamics, in a variety of mission scenarios. Submissions are solicited related to optimal control in the following dynamical contexts:

- Space mission design in multibody environments;
- Dynamic programming and its applications to space trajectories;
- Minimum-fuel and minimum-time orbit transfers;
- Ascent trajectories of launch vehicles;
- Spacecraft operations, including proximity maneuvers, rendezvous, and docking;
- Planetary descent and landing;
- Decentralized optimal control in multi-agent space systems;
- Satellite constellations, formation flying, and spacecraft clusters;
- Theory of differential games and its application to space trajectories;
- Spacecraft guidance and control;
- Spacecraft attitude maneuvering.

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### Guest Editors

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### Deadline for manuscript submissions

30 April 2026



## Aerospace

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### Editor-in-Chief

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