University of Stuttgart
Collaborative Research Center 1667 ATLAS

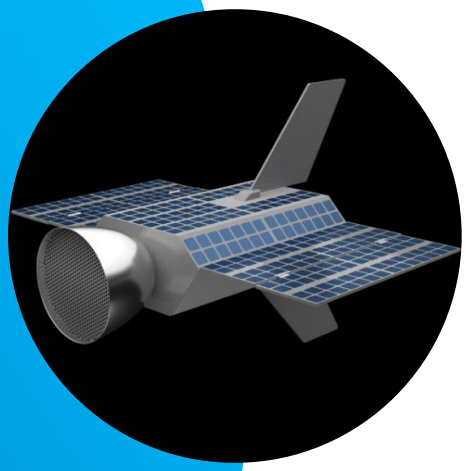
info@atlas.uni-stuttgart.de · www.sfb1667.uni-stuttgart.de · www.irs.uni-stuttgart.de

Student Assistant Opportunity

Student Assistant in Project A06: Aerodynamic Orbit Control in VLEO

The Collaborative Research Centre 1667 "Advancing Technologies of Very Low-Altitude Satellites (ATLAS)", funded by the German Research Foundation DFG, addresses the fundamental scientific and engineering challenges of rendering Very Low Earth Orbit (VLEO, about 200 km to 450 km altitude) accessible. These orbits are particularly beneficial for indispensable satellite services of our modern knowledge, information and communication society. Additionally, access to VLEO offers the opportunity to operate satellites without exposure or contribution to the increasing contamination of traditional orbits with space debris.

The Institute of Space Systems investigates how aerodynamic forces acting on satellites in VLEO may be used for orbit control purposes. Challenges include the highly variable environmental conditions, complex interaction of the satellite with the residual atmosphere and uncertainties in all parameters. We are currently looking for a motivated student to assist our research!



What you will do

- Assisting in research of aerodynamic control strategies
- Implementing software tools
- Analyzing and processing results

What you should bring

- Passion for satellite control and scientific work
- Strong programming skills (MATLAB)
- Solid understanding of orbital mechanics

What we offer

- Valuable experience in research and possibility to practically apply knowledge from your lectures
- Participation in ATLAS Academy sessions (lessons on scientific content and soft-skill development, interdisciplinary work, …) and other ATLAS events
- Opportunity for theses and contribution to publications
- Student Assistant contract, flexible working hours and remote work possible

Contact

Fabrizio Turco
turcof@irs.uni-stuttgart.de
Institute of Space Systems

Constantin Traub
ctraub@irs.uni-stuttgart.de
Institute of Space Systems

ATLAS CRC 1667

Learn more at
sfb1667.uni-stuttgart.de