



DLR – DAAD Fellowships

Fellowship No. 531

Research Area :	Space
Research Topic:	Optical technologies for space navigation
DLR Institute:	Institute of Communications and Navigation, DLR Oberpfaffenhofen
Position:	Doctoral Fellow
Openings:	1
Job Specification:	<p>Satellite optical communications enable high throughput data links between satellites as well as between satellites and ground infrastructure. These links extend the terrestrial network to space, providing capacities that can reach multiple terabits-per-second. The laser link can be used as a carrier to implement further techniques to improve the positioning of satellites and deep space probes, for example by means of ranging signals or optical angle-of-arrival measurements, enhancing the navigation for space missions.</p> <p>The research goal is to elaborate new approaches to improve space navigation techniques, by including optical measurements to complement classical techniques based on e.g. Doppler measurements or differential angle-of-arrival observations. The work will include theoretical analysis, simulations and potentially experimental tests on orbiting satellites.</p>
Required Qualification:	Master degree in Physics / Electrical Engineering / Photonics, or similar fields with superior qualification.
Advantageous Skills:	Experience in navigation systems, optical technologies for communication
English competence:	Fluent - See requirements on www.daad.de/dlr
Earliest Start Date:	01.04.2022
Application Deadline:	Until position filled
Further Information:	http://www.dlr.de http://www.daad.de/dlr