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## **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: 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.

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.

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:** As soon as possible

**Application Deadline:** Until position filled

**Further Information:** 

http://www.dlr.de http://www.daad.de/dlr

More information may be obtained by contacting:

Dr. Andrew Reeves (Andrew.Reeves@dlr.de)

Thank you for your attention! We look forward to receiving your application!