



DLR – DAAD Fellowships

Fellowship No. 488

Research Area :	Space
Research Topic:	Steerable high-performance antenna systems for global connectivity
DLR Institute:	Institute of Communications and Navigation, DLR Oberpfaffenhofen
Position:	Doctoral Fellow □
Openings:	2
Job Specification:	<p>In the near future, mega constellations like Starlink and very high throughput satellites (VHTS) will deliver extremely high data rates to users at almost any location worldwide. Flexibly steerable antenna systems with high gain and multiple beams for satellite and user terminals are crucial to realize this vision of global connectivity. In this job, you will analyse the RF link between VHTS and ground stations, identify key performance criteria and envision suitable antenna systems. For this, you will select appropriate solutions using cutting edge antenna and beamforming technology. Research will be focused on the topics “versatile antenna systems for mobile satellite communication” and “hardware and algorithms for flexible multi-beam steering in satellite communication“.</p> <p>Using DLR’s simulation, production and measurement capabilities as well as our industry partnerships, you will design, build and measure system prototypes up to technology readiness level (TRL) 5. Additionally, you will generate research impact by presenting your work at international conferences and in journal publications.</p>
Required Qualification:	Master degree in Electrical Engineering, Telecommunications, Information Technology, Physics or similar;
Advantageous Skills:	Simulation of antennas and/or RF communication systems; experience in satcom, antenna and/or RF hardware design and measurement;
English competence:	See requirements on www.daad.de/dlr
Earliest Start Date:	March 2021
Application Deadline:	Until the position is filled
Further Information:	http://www.dlr.de http://www.daad.de/dlr