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DLR – DAAD – Fellowships

Fellowship - No. 173

Applicants are invited from (but not limited to) Italy, Spain, France, Austria

Research Area: Space

Research Topic: **Design of an optical GEO feeder link**

DLR Institute: Institute of Communications and Navigation; Oberpfaffenhofen

Position: Doctoral Fellow

Openings: 1

Topic Specification: Future broadband access missions will pose stringent requirements on the communication feeder links between gateways and telecom satellites, classically located in GEO orbit. A high-capacity bidirectional optical link between the ground and a GEO satellite should be conceptually designed and demonstrated. The design should target 100 Gb/s and a high link availability (e.g., 99.9 %). Mitigations of atmospheric perturbations should be considered. The option of having a transparent satellite together with the concept of Radio-over-FSO should be studied. The design of the flight terminal should distinguish three main units: the optical head unit, the electronics unit and the laser unit.

Required Qualification: Diploma, Master or equal in Electrical Engineering / Information Technology / Applied Physics

English competence: English fluent, (German at least basic with willingness for improvement)

Earliest Start Date: As soon as possible

Application Deadline: Until position filled

Further Information: http://www.dlr.de/kn
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