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DLR – DAAD Fellowships

Fellowship No. 373

- Research Area :** Space
- Research Topic:** **Experimental study of large complex plasma systems**
- DLR Institute:** Institute of Materials Physics in Space, Research Group on Complex Plasmas, DLR Oberpfaffenhofen
- Position:** Postdoctoral Fellow
- Openings:** 1
- Job Specification:** A postdoctoral fellow position will be available in the Research Group on Complex Plasmas at the DLR Institute of Materials Physics in Space with support from German Academic Exchange Service (DAAD). The successful candidate will conduct experimental research on large complex plasma systems and will contribute to the characterization of the newly built Large Chamber experimental setup, conducting experiments, data analysis, and preparation of publications. The position will be based at the Oberpfaffenhofen location of DLR.
The Large Chamber setup is based on a relatively large (circa 90 cm diameter) vacuum chamber where a radio-frequency discharge is used to levitate dust particles, see [J.K. Meyer *et al.*, Phys. Rev. Lett. **119**, 255001 (2017)] for more detail. The goals of the present project are detailed measurements of the discharge parameters, studying the formation of large uniform 2D plasma crystals, uncovering whatever new physics the large crystals may display, and preparation for future experiments with complex plasmas under microgravity conditions on the International Space Station.
- Required Qualification:** Completed PhD degree (or equivalent) in plasma physics, experience in experimental plasma physics

- Advantageous Skills:** Experience in complex plasma physics, laser physics, image analysis and particle detection/tracking, Software: Python, IDL
- English competence:** Good communication skills and command of English: See requirements on www.daad.de/dlr
- Earliest Start Date:** 01.02.2019, duration of this appointment is 1 year with a possibility of prolongation for one more year
- Application Deadline:** Until the position is filled
- Further Information:** <http://www.dlr.de>
<http://www.daad.de/dlr>
<http://complex-plasmas.dlr.de>