

Starting date 1. July 2017
Duration of contract 3 years
Remuneration according to the German TVöD 13 (50%)

A PhD position is available within the framework of the DLR junior research group in the Institute of Planetary Research in Berlin-Adlershof. The PhD will be obtained at the Freie Universität of Berlin, Department of Geoscience.

The DLR Institute of Planetary Research in Berlin-Adlershof explores the origin, evolution and development of planets, their moons, asteroids and comets of our Solar System and other planetary systems. Using spacecraft and earth-based remote sensing techniques, laboratory experiments, in-situ investigations and numerical modelling, the institute is well established within the national and international research community and industry.

Recent space missions including the Rosetta and Dawn missions gathered abundant high resolution image and spectral data of asteroids and comets. These data provide valuable information on the morphologies and composition related to sublimation and out-gassing of volatiles. The active processes and distribution of ices on asteroids and comets are of particular interest to understand the distribution of water and other volatiles in our Solar System.

The DLR junior research group conducts an interdisciplinary approach including cartographic preparations, geologic analysis of remote sensing data of space missions as well as experimental and numerical simulations to analyse various surface features related to volatile content on asteroids and comets.

We are looking for a highly motivated student to work on the implementation and interpretation of experiments simulating volatile related regolith properties and processes on asteroids and comets. The experimental results will be correlated with image/spectral data of space missions including the Rosetta and Dawn missions. The laboratory work will be done in close collaboration with our colleagues at the University of Bern and at other laboratories and may include short research stays.

Your qualifications:

- Master/diploma or equivalent degree in experimental physics, geoscience or closely related field
- Strong interest in planetary science, space mission remote sensing data, experimental physics and geoscience
- Excellent analytical skills
- Good programming skills, preferably with experience in image processing
- Ability to work in a structured way both, independently and as part of a team
- Very good communication skills in English

Additional qualifications:

- Profound scientific knowledge of asteroids and comets
- Experience with experimental vacuum techniques
- Experience with spectral and image data analysis of space missions

Interested candidates should send a letter of motivation summarizing their qualifications, research interests and objectives, a complete CV, grade transcripts/diplomas, and 1-2 letters of recommendation.

Please submit your application by **31. May 2017** online (www.dlr.de/jobs) or by post.

Contact: Dr. K. Otto (+49 30 67055 587)

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