**Technische Universität Berlin - Fakultät VI Planen Bauen Umwelt - Institut für Geodäsie und Geoinformationstechnik – Fachgebiet Planetengeodäsie**

**Research assistant in the DFG project Cassini**

**Pay group 13 TV-L Berlin universities**

**Field of activity:**

This project at the Technische Universität Berlin (TUB) is concerned with the properties and dynamics of the moons of the planet Saturn. The goal is to create reference models for shape and rotation of the moons, as well as to perform the corresponding measurements on the basis of image data from the Cassini mission. Thereby, Saturn’s strong tidal forces acting on the satellites play an important role. The new models provide valuable boundary conditions for the inner structure and hints about the formation of the moons. The project is funded by the German Research Foundation (DFG) and is carried out in cooperation with the German Aerospace Center (DLR), Institute of Planetary Research.

We are looking for a committed scientist for this challenging cooperation project. With very good previous knowledge, a doctoral thesis can be prepared on the basis of expected project results.

**Task description:**

* Work in the field of photogrammetry using image data of the Cassini Mission
* Carry out block adjustments; create control point networks
* Modelling the shape and rotation of the moons
* Studies on equilibrium shapes and perturbations in rotation
* Cooperation with the German Aerospace Center (DLR)
* Preparation and presentation of the results in project meetings, symposia and in scientific journals.

**Expected qualifications:**

* Successfully completed university studies (master, diploma or equivalent) in geodesy, planetary research, physics, mathematics, or a related field.
* Expertise in the evaluation of planetary image data and photogrammetric modelling.
* Interest and preferably experience in planetary research, geodesy and dynamics of small bodies.
* Competence in data processing under LINUX and with C
* Ability to work independently and to communicate with external cooperation partners, willingness to integrate into a multidisciplinary team
* Very good knowledge of written and spoken English

**Start: immediately**

**Duration: 3 years**

**Working time: 75%**

**Compensation: E13 TV-L Berlin universities**

**Location: TU Berlin**

**Notes on application:**

Please send your written application with the usual documents (curriculum vitae, university certificates, list of publications and possibly up to three references) and the reference number to

Technical University of Berlin

- The President

Faculty VI, Institute of Geodesy and Geoinformation Technology, Planetary Geodesy

Prof. Jürgen Oberst, Sekr. H 12,

Straße des 17. Juni 135, 10623 Berlin, Germany

or by e-mail to [rosemarie.kunkel@tu-berlin.de](mailto:rosemarie.kunkel@tu-berlin.de)

To ensure equal opportunities between women and men, applications from women with the relevant qualifications are expressly welcome.

Severely handicapped persons with equal aptitude will be given preferential consideration. The TU Berlin appreciates the diversity of its members and pursues the goals of equal opportunities.

For cost reasons, application documents will not be returned to sender. Please turn in copies only.