Technische Universität Berlin



Research Assistant - 0.75 working time - salary grade E13 TV-L Berliner Hochschulen

Research will be carried out in the framework of the newly established DFG priority program 1992 **Exploring the Diversity of Exoplanets** (www-astro.physik.tu-berlin.de/exoplanet-diversity/) for the project **Interior-atmosphere feed-backs and the nature of detected sub-Neptunian planets**. The project will be located at the TU Berlin, Center of Astronomy and Astrophysics, in the Planetary Physics group led by Prof. Dr. Heike Rauer. Work will be performed in close cooperation with the Department of Extrasolar Planets and Atmospheres at the Institute of Planetary Research of the German Aerospace Center (DLR) in Berlin-Adlershof. It focuses on the modelling of the possible interior structures, interior evolution and outgassing of known sub-Neptunian extrasolar planets investigating the properties of the resulting atmospheres as well as the interactions between atmosphere and interior. The project is split into two sub-projects dealing with interior and atmosphere modelling.

Faculty II - Center of Astronomy and Astrophysics

Reference number: II-515/17 (starting at 01/01/18 / for a period of 3 years / closing date for applications 31/10/17)

Working field: The successful candidate will work with Dr. Mareike Godolt on the atmosphere modelling sub-project, extending and applying one-dimensional atmosphere models for gas and rocky planets to the possible atmosphere scenarios of sub-Neptunes. The work will be carried out in close collaboration with the successful candidate for the interior-modelling sub-project supervised by Dr. Nicola Tosi. It further includes building and applying atmospheric escape parametrizations from detailed atmospheric escape studies in collaboration with the Institut für Weltraumforschung, Graz. PhD thesis preparation is possible.

Requirements:

- successfully completed university degree (Master, Diplom or equivalent) in physics, meteorology, geophysics, applied mathematics or related disciplines
- solid programming experience in a high-level language (FORTRAN, C, Python, or similar)
- basic knowledge of astrophysics, radiative transfer or atmospheric physics
- experience in numerical modelling (of planetary atmospheres in particular) will be beneficial

More information can be obtained from Dr. Mareike Godolt (godolt@tu-berlin.de).

Please send your written application with the **reference number** and the usual documents (letter of motivation including a description of your research interests, CV, copies of university degrees and contact details for at least two letters of reference) to Technische Universität Berlin - Der Präsident - Fakultät II, Zentrum für Astronomie und Astrophysik, Dr. Mareike Godolt, Sekr. EW 8-1, Hardenbergstraße 36, 10623 Berlin or by e-mail to kieschke@astro.physik.tuberlin.de.

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored.

Please send copies only. Original documents will not be returned

The vacancy is also available on the internet at http://www.personalabteilung.tu-berlin.de/menue/jobs/



