

## Mee(h)r als nur Studieren

Wer eine traditionsreiche Universität und den Mut zu Innovationen gleichermaßen zu schätzen weiß, ist an unserer Universität in der jungen und lebendigen Hansestadt Rostock richtig.



### Job Announcement P 96/2020

University of Rostock offers you a varied and demanding job in a tradition-conscious, yet innovative, modern and family-friendly university in a lively city by the sea.

The Faculty of Mathematics and Natural Sciences, Institute of Physics, working group of Prof. Dr. Ronald Redmer, invites applications as PhD Student in Computational Physics. The employment contract is limited to three years within a joint project "*Stochastic density functional theory for studying matter under extreme conditions (sDFT)*" with Prof. Dr. Roi Baer, Hebrew University Jerusalem, Israel, and funded by the German-Israeli-Foundation for Research and Development (GIF). The following position is to be filled as soon as possible.

### PhD Student (m/f/d)

**(EG 13 TV-L pay scheme, part time position, 20 hours per week, project position "*Stochastic density functional theory for studying matter under extreme conditions (sDFT)*" )**

#### Tasks

- Calculate the behavior of matter under extreme conditions with DFT simulations using the Kohn-Sham method (KS-DFT) as well as a new stochastic approach (sDFT)
- Implement the sDFT method in collaboration with the partner group of Prof. Dr. Roi Baer at Hebrew University Jerusalem, Israel
- Compare with the KS-DFT method
- Calculate the equation of state and the electrical conductivity for H-He and H-C-N-O mixtures for conditions as typical for the interior of giant planets like Jupiter and Neptune

#### Requirements

- Very good university degree (Diploma/Master) in Theoretical Physics or Theoretical Chemistry
- Good knowledge of quantum and computational physics
- Experience with ab initio simulations and/or DFT is welcome
- Good knowledge of programming languages as C++
- Experience with Unix systems is welcome
- A very good command of the English language

**We offer:**

- A multi-faceted, diverse and challenging occupation in a university which is rich in tradition but at the same time innovative, modern and family-friendly, being situated in a lively city at the Baltic Sea
- Employment relationship according to the provisions of the collective agreement for the public service of the federal states (TV-L)
- Part-time employment
- 30 days annual vacation
- Flexible working hours
- Various offers for health promotion and for the compatibility of family and work, e.g. through our family office or our health management URgesund
- Variety of training opportunities, including language courses, IT courses, seminars for professional development
- Discounted participation in the extensive range of university sports

**Further Notes:**

The University of Rostock offers a broad spectrum of study programs to more than 15.000 students. It is divided into nine faculties, which are cross-linked by the faculty of Interdisciplinary Research. The Faculty of Mathematics and Natural Sciences comprises four research institutes.

The position is a fixed-term position according to § 2 (1) WissZeitVG.

University of Rostock is following the university management guidelines.

Equality is an integral part of our policy towards personnel. Applications of candidates with impairments or equivalent persons are welcomed. The University of Rostock aspires the increase of women in research and teaching and explicitly welcomes highly qualified women to apply to the position. Applications from persons with foreign nationalities or with migration background are also welcome.

If so desired, the staff council can be involved in the application procedure. In such case, please include in your application documents a formless request for the involvement of the staff council.

We look forward to your email application with meaningful documents. Please, send the documents with the subject **"Job Announcement P 96/2020"** to [bewerbungen.personal@uni-rostock.de](mailto:bewerbungen.personal@uni-rostock.de), latest **September 30th, 2020**. Only applications that are received in due time, under the mentioned email address and as one PDF document will be considered. The protection of your personal data is very important to us. Therefore, the data collected as part of the application process is collected, processed and used in accordance with the relevant data protection regulations.

Application- and travel costs cannot be covered by the State Mecklenburg-Vorpommern.

For further questions, please, contact us under:

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Staff service

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