Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

1919 2019 100 JAHRE WISSENSWERFT Universität Hamburg

The Faculty of Mathematics, Informatics and Natural Sciences, Department of Physics, Institute of Laser Physics invites applications for a

RESEARCH ASSOCIATE FOR THE PROJECT "CLUSTER OF EXCELLENCE QUANTUM UNIVERSE" FINITE ELEMENT MODELLING OF MIRROR SUSPENSIONS

- SALARY LEVEL 13 TV-L-

The position in accordance with Section 28 subsection 3 of the Hamburg higher education act (Hamburgisches Hochschulgesetz, HmbHG) commences on **1 June 2019.**

This is a fixed-term contract in accordance with Section 2 of the academic fixed-term labor contract act (Wissenschaftszeitvertragsgesetz, WissZeitVG). The term is fixed for a period of 3 years. The position calls for 26 hours per week.

RESPONSIBILITIES:

Duties include academic services in the project named above. Research associates may also pursue independent research and further academic qualifications.

SPECIFIC DUTIES:

The Cluster of Excellence "Quantum Universe" performs research to understand mass and gravity at the interface between quantum physics and cosmology. The research team includes leading scientists from mathematics, particle physics, astrophysics, and cosmology at Universität Hamburg and DESY.

The candidate will be part of a dedicated team that realizes prototype setups for future gravitational-wave detectors (GWDs) such as the envisioned Einstein-Telescope. The prototypes have the goal to reduce thermal noise as well as quantum noise in GWDs. The duties of the candidate are the realization of finite element modelling of the mechanical, opto-mechanical, and thermal properties of the prototypes, the adaptation of the models to the actual experimental parameters, the generation of models that agreement with the experimental observations, at room temperature as well as cryogenic temperatures.

Doctoral research associates will become members of the Quantum Universe research school (QURS) and through this receive offers for academic training, soft skills, and career planning. In addition, they will receive individual budgets, meant to enable them to attend summer schools, conferences or other educational and supporting measures. Additional travel money for project-specific duties will be made available via the hosting research groups. Doctoral research associates may actively participate in the organization of the Cluster via an early career council.

REQUIREMENTS:

A university degree in a relevant field. Experience in opto-mechanical experiments and FE modelling (preferred is software experience in COMSOL). Very good German or English language skills.

The University aims to increase the number of women in research and teaching and explicitly encourages women to apply. Equally qualified female applicants will receive preference in accordance with the Hamburg act on gender equality (Hamburgisches Gleichstellungsgesetz, HmbGleiG).

Qualified disabled candidates or applicants with equivalent status receive preference in the application process.

For further information, please contact Prof. Dr. Roman Schnabel (roman.schnabel@physnet.uni-hamburg.de) or consult our website at www.qu.uni-hamburg.de.

Applications should include a cover letter, a tabular curriculum vitae, copies of degree certificate(s), and two letters of recommendation. Please send applications by **1 March 2019** to: roman.schnabel@physnet.uni-hamburg and office@qu.uni-hamburg.de. Later applications are considered until the position is filled.