



Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG



As a University of Excellence, Universität Hamburg is one of the strongest research universities in Germany. As a flagship university in the greater Hamburg region, it nurtures innovative, cooperative contacts to partners within and outside academia. It also provides and promotes sustainable education, knowledge, and knowledge exchange locally, nationally, and internationally.

The Faculty of Mathematics, Informatics and Natural Sciences, Department of Mathematics, Analysis and Differential Geometry invites applications for a

RESEARCH ASSOCIATE FOR THE PROJECT

“CLUSTER OF EXCELLENCE QUANTUM UNIVERSE”

MATHEMATICS OF HYPERKÄHLER AND QUATERNIONIC KÄHLER MANIFOLDS RELEVANT FOR THE SWAMPLAND DISTANCE CONJECTURES

- 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 April 2020 or later**.

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 39 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.

This postdoc position is intended to pursue research on the mathematical mechanisms for the smoothing of hyperkähler and quaternionic Kähler metrics relevant for string-theoretical checks of the swampland distance conjectures. The project is part of an interdisciplinary collaboration between mathematicians and physicists aiming to explore the links between the geometry of scalar moduli spaces in string theory, the swampland conjectures and gravitational-wave physics. Active participation in this collaboration is expected

Postdoctoral research associates will become member of the Quantum Universe research school (QRS) 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 conferences or other educational and supporting measures. Additional travel money for project-specific duties will be made available via the hosting research groups. Postdoctoral research associates may participate in the supervision of doctoral students, teaching at the University, and in the organization of the Cluster via an early career council.

REQUIREMENTS:

A university degree in a relevant field. Strong background in differential geometry.

The University aims to increase the number of women in research and teaching and explicitly encourages qualified 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. Jörg Teschner (joerg.teschner@desy.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 three letters of recommendation. Please send applications by **18 December 2019** to: joerg.teschner@desy.de, heike.wessling@uni-hamburg.de and office@qu.uni-hamburg.de.
Later applications will be considered until the position is filled.

Please do not submit original documents as we are **not** able to return them. Any documents submitted will be destroyed after the application process has concluded.