

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

RESEARCH ASSOCIATE FOR THE PROJECT
“CLUSTER OF EXCELLENCE QUANTUM UNIVERSE”
RECONSTRUCTION OF BOOSTED DECAYS AT THE LHC
- 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 2019 or earlier**.

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.

Candidates are expected to engage in the area of the reconstruction of boosted hadronic decays of heavy particles at the LHC (top, W/Z, Higgs tagging) and its usage in Standard Model measurements and searches for new physics. This includes phenomenological studies as well as sophisticated statistical analyses of data of the CMS experiment and their interpretation. The latter may include methods of artificial intelligence, like deep learning.

Doctoral research associates will become members 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 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 LHC data analysis is advantageous.

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. Johannes Haller (+49 49 8998-4710 or Johannes.Haller@physik.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 **15 February 2019** to: Johannes.Haller@physik.uni-hamburg.de and office@qu.uni-hamburg.de. Later applications are considered until the position is filled.