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, CUI: Advanced Imaging of Matter invites applications for a

RESEARCH ASSOCIATE FOR THE PROJECT
“CLUSTER OF EXCELLENCE 'CUI: ADVANCED IMAGING OF MATTER' - TOPOLOGICAL QUASIPARTICLES IN LOW-DIMENSIONAL MAGNETIC SYSTEMS”
- 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 April 1, 2021.

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 75% of standard work 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:
We are looking for an efficient, goal-oriented group member of the Posske research group on topology in condensed matter at the Universität Hamburg, which also is embedded in the German Cluster of Excellence CUI: Advanced Imaging of Matter.

The successful applicant will in general work on the topics pursued in the research group. This includes the possible supervision of exercise groups. The main focus of this project is on classifying topological magnetic quantum particles that dynamically emerge in low-dimensional magnetic systems, see *Phys. Rev. Lett. 122, 097204 (2019)*.

The research group is primarily concerned with:
- topological electronic systems and nonabelian anyons,
- topological quantum magnetism, and
- topological quantum computing.

* Full-time positions currently comprise 39 hours per week.
Further info on the activities of the group and the project can be found at www.posske.de.

Alongside the project, obtaining a PhD can be pursued. The candidate will be a member of the thriving excellence cluster CUI: Advanced Imaging of Matter at the Universität Hamburg, and in particular be able to participate at its graduate school with attractive courses on advanced topics in physics, programming, etc.

**REQUIREMENTS:**

A university degree in a relevant field. We are looking for candidates with a strong experience in condensed matter and solid state physics, topological systems, exotic quasiparticles, and time-dependent quantum mechanical methods. A strong background in analytical and mathematical methods is necessary for the task, most importantly in linear algebra and topology (set theoretic and algebraic), and geometry. Additionally, experience in Python programming or a similar language is highly beneficial.

The Free and Hanseatic City of Hamburg promotes equal opportunity. As women are currently underrepresented in this job category at Universität Hamburg according to the evaluation conducted under the Hamburg act on gender equality (Hamburgisches Gleichstellungsgesetz, HambGleiG), we encourage women to apply for this position. Equally qualified and suitable female applicants will receive preference.

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

For further information, please contact Thore Posske, tposske@physnet.uni-hamburg.de or consult our website at www.posske.de.

Applications should include a cover letter, a tabular curriculum vitae, and copies of degree certificate(s). Please send applications by December 15, 2020 (inclusive) to: tposske@physnet.uni-hamburg.de.

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.