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 MATER' - DESIGN AND SETUP OF AN ION MICROSCOPE FOR NOVEL ATOM-ION HYBRID QUANTUM 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 01.10.2020.

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:**

Novel atom-ion quantum systems can be realized by ionizing a Bose-Einstein condensate with ultrashort laser pulses. In such hybrid systems, we will investigate the formation of polarons and the sympathetic cooling of the ion by the surrounding bath of ultracold atoms. For this purpose, a new detection unit with single ion detection efficiency and a high spatial resolution has to be designed and setup.

**REQUIREMENTS:**

A university degree in a relevant field. Experimental expertise in the field of laser cooling and Bose-Einstein condensation or ultrafast physics is required. Furthermore, experience in setting up highly stable laser systems, in control technology and in charged particle detection is desirable.

* Full-time positions currently comprise 39 hours per week.
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 Prof. Dr. Markus Drescher (markus.drescher@desy.de) or consult our website at https://www.cui-advanced.uni-hamburg.de/ or https://www1.physik.uni-hamburg.de/en/ilp/sengstock/research/femto-bec.html.

Applications should include a cover letter, a tabular curriculum vitae, and copies of degree certificate(s). Please send applications by 28.08.2020 to: markus.drescher@desy.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.