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 Physics, Institute for Theoretical Physics invites applications for a

RESEARCH ASSOCIATE FOR THE PROJECT “SEEING EXCITONS IN MOTION”
Funded by the Volkswagen Foundation
- 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 October 1st 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 65% 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:
The candidate will work within the project "Seeing excitons in motion" funded by the Volkswagen Foundation. The goal of the project "Seeing excitons in motion" is to invent methods to follow motion of excitons in photovoltaic materials by means of ultrashort light pulses. A quantum-mechanical analysis will be employed to obtain tools to extract the details of exciton dynamics with sub-femtosecond temporal and sub-nanometer spatial resolution.

The successful candidate will describe the interaction of attosecond x-ray pulses with excitons in crystalline structures. This task will involve a theoretical analysis using quantum electrodynamics, simulations using ab initio simulation packages and development of codes for computations.

* Full-time positions currently comprise 39 hours per week.
REQUIREMENTS:
A university degree in a relevant field. Applicants should have or be expecting to achieve a Master Degree or equivalent in physics or in a related field. Good English skills, spoken and written, are mandatory. Previous research experience in theoretical physics or in theoretical chemistry is highly desirable. Experience in solving quantum-mechanical problems analytically and/or code development to describe quantum-mechanical processes is a plus.

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. Daria Gorelova or consult our website at https://www1.physik.uni-hamburg.de/en/th1/ag-daria-gorelova/forschung.html or https://www.desy.de/~dpopova/. All applications will be reviewed after the application deadline and a decision on an application will be sent only afterwards. Interviews could be performed online.

Applications should include a cover letter, a tabular curriculum vitae, and copies of degree certificate(s). Please send applications by September, 13th 2020 to: daria.gorelova@cfel.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.