



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 Physics, Institute of Nanostructure- and Solid State Physics invites applications for a

## RESEARCH ASSOCIATE FOR THE PROJECT B9 DES SFB925 “LIGHT INDUCED DYNAMICS AND CONTROL OF CORRELATED 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 01.07.2020.

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 until 30.06.2023. 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:

The aim of the project is to experimentally investigate how the spin dynamics of low-dimensional magnetic systems is governed by their interactions with the electrons in metallic, superconducting, and topological insulator substrates. The low-dimensional magnetic systems shall be prepared under ultra-high vacuum conditions on very well defined and clean substrates. Their characterization shall be performed by the method of spin-polarized scanning tunneling microscopy/spectroscopy at low temperatures and in external magnetic fields. The dynamics shall be investigated by means of at least one of the following techniques which are based on spin-resolved scanning tunneling microscopy/spectroscopy: the telegraph noise measurement, electrical pump-probe schemes and the local electron spin resonance technique. The job includes the maintenance of the used low-temperature scanning tunneling microscope, sample preparation, experimental data measurement and analysis, presentation of the results at workshops of the SFB925 and at international conferences, and finally their publication in peer-reviewed scientific journals.

\* Full-time positions currently comprise 39 hours per week.

## REQUIREMENTS:

A university degree in a relevant field. M.Sc. in Physics or equivalent qualification. It is mandatory that the applicant has a strong record in spin-polarized scanning tunneling microscopy/spectroscopy and MBE growth. Furthermore, the applicant should have a strong background in surface science, magnetism, and cryogenic technology.

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. Roland Wiesendanger, Dept. Physik, Jungiusstrasse 11A, Tel.: 040 42838-5244, E-Mail: [wiesendanger@physnet.uni-hamburg.de](mailto:wiesendanger@physnet.uni-hamburg.de) or consult our website at [www.nanoscience.de](http://www.nanoscience.de).

Applications should include a cover letter, a tabular curriculum vitae, and copies of degree certificate(s). Please send applications by 30.04.2020 to: Prof. Dr. Roland Wiesendanger, Jungiusstrasse 11A, Tel.: 040 42838-5244, E-Mail: [wiesendanger@physnet.uni-hamburg.de](mailto:wiesendanger@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.