



The Friedrich Schiller University Jena connects: People and ideas, science and business, universities and non-university research. Rooted in the heart of Germany and linked to the whole world, it shapes Jena's character as a future-oriented and cosmopolitan city. At the Institute for Applied Physics (IAP) of the Friedrich Schiller University Jena there are

Three open positions for scientific employees m/f/d (PhD or Postdoc) in the following three research topics:

"Broadband and ultrafast nanoscale imaging in the XUV" Reg.-Nr.: 306 /2019

You will develop broadband XUV imaging methods based on coherent diffractive imaging for observing ultrafast dynamics on (sub-)fs temporal and nanometer spatial scales. For this purpose, you have already acquired profound experience with optics, lasers, coherent imaging or XUV radiation.

"Coherent high photon flux soft X-ray sources" Reg.-Nr.: 307/2019

You will develop novel coherent laser sources in the soft X-ray spectral region. Your research is focused on efficient frequency conversion into this spectral region via high-harmonic generation. Moreover, advanced control of the spectral/temporal characteristics as well as the polarization state is pursued. Applications include spectroscopy and high-resolution imaging of solid state as well as biological samples. Ideally, you already have experience with lasers, vacuum systems and XUV or X-rays.

"Ultra-fast XUV spectroscopy in molecules, ions and solids" Reg.-Nr.: 308/2019

You will investigate ultrafast processes on Femtosecond time scales in molecules, ions and solids. For this purpose, you will develop pump-probe experiments based on laser-driven high harmonic sources in the XUV. Experience in optics, laser physics, atomic and molecular physics is desired.

The successful candidates will work at the Helmholtz Institute Jena and at the Institute for Applied Physics (IAP) of the Friedrich Schiller University Jena. The IAP focuses on basic and applied research in the fields of micro- and nanooptics, fiber- and waveguide optics, ultrafast optics, quantum optics and optics. The research group "Fiber & Waveguide Lasers" develops new concepts for solid-state lasers such as fiber lasers and deals – amongst others - with pulse shaping and fiber optical amplification of ultrashort laser pulses, high harmonic generation, laser simulation tools, microchip lasers.

Our requirements:

- Diploma or Master's degree in physics, optionally computer science or related subject; corresponding a doctorate (PhD) for postdoctoral positions, is required
- open communication and the ability to work in a team
- solid language skills in German and English

We offer:

- an exciting field of activity with creative leeway
- multidisciplinary research environment
- globally unique laboratory infrastructure and equipment worldwide



- university health promotion and a family-friendly working environment with flexible working hours
- attractive fringe benefits, e.g. Capital Assets, Job Ticket (benefits for public transport), occupational pensions (VBL)
- salary in accordance with the terms of the collective agreement for the public service of the Länder (TV-L) in accordance with personal qualifications up to EG 13

The positions are to be filled immediately and are for a limited period of time; dependent on the project duration, with the possibility of an extension if appropriate.

The postdoctoral positions are full-time positions (100%) and 75% for doctoral positions.

Severely handicapped people are given preference in case of equal qualifications, aptitude and professional qualifications.

If you are interested, please send your documents mentioning the registration number until 01.11.2019 to:

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In the case of an application by letter we ask you to submit your documents only as copies, as those are properly destroyed after the application process. Please also note our application hints at: www.uni-jena.de/stellenmarkt_hinweis.html.