## Freie Universität Berlin - Department of Physics

The Weinelt research group studies ultrafast dynamics at solids and their surfaces initiated by ultrashort laser pulses. This includes single and collective quasiparticle dynamics to unravel signatures of non-equilibrium dynamics and phase transitions in the transient electronic structure. We develop a fundamental understanding of processes such as ultrafast demagnetization and magnetic switching by following electronic scattering, spin transport, and magnon excitation with complementary experimental methods. We have a strong background and reputation in state-selective and spin-sensitive time- and angle-resolved photoemission techniques. Our research is funded by DFG through Transregio CRC 227 “Ultrafast Spin Dynamics” (2018-2029), CRC 1772 “Heterostructures of Molecules and Two-Dimensional Materials” (2025 – 2029), and the Cluster of Excellence “Center for Chiral Electronics” (start 2026).

# Research Assistant (Praedoc) (m/f/d) (DM-665)

City: Berlin; Starting date (earliest): At the earliest possible; Duration: befristet bis zum 31.12.2029; Remuneration: Entgeltgruppe 13 TV-L FU; Reference number: DM-665; Closing date: 06/04/26

### Tasks

Your tasks comprise the commissioning of an electron momentum microscope in combination with a high-harmonics light source. In close cooperation with other members of the AG Weinelt and collaborators at the Fritz-Haber-Institute (MPG) you will help to explore the microscopic processes behind electron, lattice, and spin interactions in magnetic van-der-Waals materials. During this, you will learn how to handle ultrahigh-vacuum apparatus and perform spin- and time-resolved ARPES experiments. You will work with a femtosecond fiber laser system with optical parametric amplifiers and a high-harmonics beamline and will be involved in electronic data acquisition and data evaluation.

For further qualification, you’ll be given the opportunity to undertake doctoral research and are expected to participate in the Graduate School of the CRC Ultrafast Spin Dynamics.

### Requirements

**Key Requirements**
Completed university studies with a Master degree preferentially in physics

### Desirable

- Master work in experimental physics
- Experience in at least two of the following areas:

- angle-resolved photoelectron spectroscopy and/or ultrafast optical spectroscopy, optics, surface science, magnetization and spin dynamics; strong background in solid state physics.

**Application**

**If you are interested in what we have to offer,**

then you can send your application materials to us directly. Simply submit your application via the Online Recruiting Portal by clicking the “Apply now” button. From there you will be redirected to set up a profile (only necessary for your first application).

You can also get in touch with Mr. Cornelius Gahl (c.gahl@fu-berlin.de).

More information at https://stellenticket.de/202673/BUA/
Offer visible until 06/04/26