

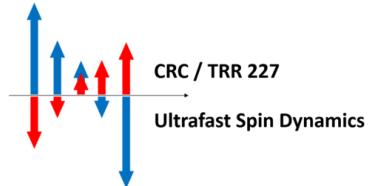


Emmy Noether Group Dynamics of Correlated Materials

Open PhD position (m/f/d)

Ultrafast electron dynamics of 2-dimensional van-der-Waals ferromagnets

The Emmy Noether research group *Dynamics of Correlated Materials* at the Fritz Haber Institute (pc.fhi-berlin.mpg.de/docm/) is offering a PhD position in experimental condensed matter physics. Our group investigates the ultrafast dynamical processes in strongly correlated and low-dimensional systems, in order to understand the microscopic interactions governing their fascinating physics. The Fritz Haber Institute and the Department of Physical Chemistry offer an excellent and interdisciplinary environment for top-of-the-line research. The group operates a world-leading high-repetition rate extreme ultraviolet (XUV) time- and angle-resolved photoelectron spectroscopy (trARPES) setup including a momentum microscope and performs time-resolved x-ray experiments at large scale research facilities.



Topics of the research: This research will be embedded within the collaborative research center CRC/TRR227 Ultrafast Spin Dynamics (www.trr227.de), which starts now into its 2nd funding period. The offered position concentrates on the femtosecond dynamics in 2-dimensional van-der-Waals ferromagnets and their heterostructures. The successful candidate will investigate the ultrafast dynamics of their electronic structure mainly using trARPES, and study the response of their band structure to ultrafast magnetization changes. Additionally, the interaction of spin-polarized currents with the spin/valley polarized band structure of transition-metal dichalcogenides will be studied. The PhD position is offered for a duration of three years.

Your profile:

Applicants should hold a master's degree or equivalent in physical sciences and should have a strong background and interest in at least one of the following areas:

- femtosecond time-resolved spectroscopies
- photoelectron spectroscopy
- physics of low-dimensional magnets
- preparation of van-der-Waals heterostructures

Your application should include:

- Motivation letter
- curriculum vitae
- If available: a list of publications
- description of previous work
- contact details of at least two academic references

Applications for this position are only accepted via our online application portal. Go to www.fhi.mpg.de/open-positions and submit your application as soon as possible. Closing date: Applications will be accepted until the position is filled. We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

The Max Planck Society has set itself the goal of employing more severely disabled people. Applications from severely disabled people are expressly encouraged. The Max Planck Society strives for gender equity and diversity. We welcome applications from all backgrounds and are particularly pleased to receive applications from migrants. Furthermore, the Max Planck Society aims to increase the proportion of women in areas where they are underrepresented. Women are therefore expressly encouraged to apply.

The Fritz-Haber-Institute (FHI) in Berlin-Dahlem is one of the most renowned institutes within the Max Planck Society (MPG), Germany's organization for basic research. At the FHI, scientists from all over the world are engaged in fundamental studies in the field of chemical physics at interfaces and surfaces, catalysis research and molecular physics. **Berlin:** The Fritz Haber Institute (FHI) is located in the quiet south-west of Germany's capital Berlin, which is a large, tolerant and cosmopolitan city. Berlin offers a wide variety of culture, art, music, and outdoor opportunities.

For more information please contact:

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