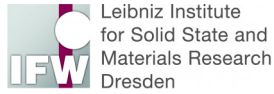


## **Leibniz-Institut für Festkörper- und Werkstofforschung Dresden (IFW Dresden e.V.)**



The Leibniz Institute for Solid State and Materials Research Dresden e. V. (IFW Dresden) conducts modern materials research on a scientific basis for the development of new and sustainable materials and technologies. The institute employs an average of 500 people from over 40 nations and, in addition to its scientific tasks, is dedicated to promoting young scientists and engineers. Further information at: <http://www.ifw-dresden.de>

### **PhD position (m/f/d) for research in non-equilibrium condensed matter physics 012-25-5100**

City: Dresden; Starting date (earliest): At the earliest possible; Remuneration: TV-L;  
Reference number: 012-25-5100; Closing date: 09/03/25

#### **Working field**

The research aims to develop new theoretical frameworks to explore dynamical phenomena in magnetic quantum materials driven out of equilibrium. The key mechanisms of interest include elastic excitations and light-matter interactions. The study will explain and predict exotic transport properties and pump-probe experiments, and offer insights for the phononic/photonic control of quantum materials to enable the design of innovative quantum de-vices with spintronic and quantum-information functionalities.

#### **Requirements**

We are seeking highly-motivated Ph.D. students (m/f/d) to join our team in advancing the frontiers of non-equilibrium condensed matter physics.

The candidate (m/f/d) must hold a MSc/Diploma in Theoretical Physics, knowledge of solid-state physics, statistical physics and advanced quantum mechanics. In addition the applicant (m/f/d) should have strong interest in nonequilibrium physics and eagerness to explore interdisciplinary approaches and tackle complex theoretical and computational challenges in emerging fields. Working proficiency in spoken and written English is also needed. Experience in one or more of the following topics along with strong theoretical/programming skills (Julia/Python/C++) is highly desirable: Quantum transport theories, Nonequilibrium quantum dynamics, Spintronics /quantum phononics/photronics.

## What we offer

- Employment in accordance with the collective agreement for the public service of the federal states (TV-L)
- A modern, well-equipped workplace on the campus of the Technische Universität Dresden
- Flexible, family-friendly working hours
- 30 days paid vacation per year
- Company pension scheme (VBL)
- Benefits for job ticket/Germany ticket
- Special annual payment
- Capital-forming benefits
- Cooperation agreements with daycare centers to help with childcare
- Company health management (back training course, health day with various offers),
- discounted sports offers from the Dresden University Sports Center,
- job-related further training opportunities and language courses,
- Company restaurant with a variety of breakfast and lunch dishes.

You can expect an interesting, independent and challenging job in a research institute with international colleagues and a good working atmosphere. The position comprises 65% of the full-time weekly hours, an initial contract limited to 1 year + an extension of minimum 2 years after evaluation.

## Application

IFW Dresden strives for a balanced gender ratio in all areas. In science, IFW Dresden would like to increase the proportion of women and therefore explicitly invites suitably qualified female scientists to apply. The application of severely disabled persons is explicitly welcome.

Please send your application with CV, letter of motivation describing your scientific career, skills and experience, as well as copies of all certificates and preferably list at least two scientific referees that can be contacted for a reference letter. Please submit your application as one pdf file by 9th March 2025 indicating the reference number 012-25-5100 to:

[bewerbung@ifw-dresden.de](mailto:bewerbung@ifw-dresden.de).

For more information please contact Dr. Shu Zhang ([s.zhang@ifw-dresden.de](mailto:s.zhang@ifw-dresden.de)).

More information at <https://stellenticket.de/192099/LUH/>  
Offer visible until 09/03/25

