



The Leibniz Institute for Solid State and Materials Research Dresden (IFW Dresden) is a non-university research institute and a member of the Leibniz Association. The IFW employs approximately 600 people and one focus is on the training of young scientists besides enhancing fundamental and applied research development. At the highest international level, the IFW operates modern materials science on a scientific basis and makes the obtained results useful for the economy. The complex and interdisciplinary research work is carried out within the IFW by five scientific institutes, which are supported by a highly developed technical infrastructure. The IFW supports its employees in reconciling work and family life and regularly submits to the berufundfamilie® audit. Further information at: <http://www.ifw-dresden.de>.

The Institute for Solid State Research at the IFW Dresden offers a

PhD Position (m/f/d)
Magnetometry and Thermodynamics on Magnetic Topological Materials

starting as soon as possible in part-time (20 hours per week).

The Research Team “Magnetic Properties” at the Institute for Solid State Research, IFW Dresden, is currently looking for a student to fill a Doctoral Researcher Position in magnetometry and thermodynamics on magnetic topological materials.

The aim of the doctoral research is an experimental study of a new emerging class of materials, the layered magnetic van der Waals (vdW) compounds, that feature both a non-trivial electronic topology and intrinsic magnetism. The main focus will be on a comprehensive magnetic and thermodynamic characterization of materials by static magnetometry methods in combination with specific heat and thermal expansion/magnetostriction techniques. In parallel, the electronic structure of the vdW magnets will be studied by angle resolved photoemission spectroscopy via collaborating partners, which will make it possible to assess correlations between the observed magnetic properties and the topological surface band structure.

This doctoral research project will be a part of the recently established Dresden-Würzburg Center of Excellence - Complexity and Topology in Quantum Matter (ct.qmat); see www.ctqmat.de for further information. The doctoral student will be embedded in the exciting most active research environments on topological condensed matter physics worldwide - the Technische Universität Dresden together with its external research institutes (Helmholtz-Zentrum Dresden-Rossendorf, Leibniz IFW Dresden, Max Planck Institutes MPI PKS and MPI CPfS) and the Julius-Maximilians-Universität Würzburg.

We expect from the successful candidate a Master’s degree in Physics (background in Solid State Physics and Magnetism) as well as a high motivation, creativity, and an enthusiastic interest in experimental research. Very good communication skills in English are a further expectation. Hands-on experience in laboratory work (e.g. handling cryogenic liquids, low temperatures, magnetic fields) and programming skills (e.g. LabView, Python, MATLAB) are desirable but not mandatory.

The employment contract is limited to 36 months with the possibility of renewal. The remuneration is based upon the TV-L rules (EG 13, 50%).

The IFW would like to increase the proportion of women in science. Qualified women are therefore explicitly invited to apply. Severely disabled applicants (m/f/d) are given preferential treatment if they have the same qualifications.

If you are interested in the position, please send your application including a CV and the list of publications, a motivation letter describing the research career goals, skills and experience, copies of certificates as a single pdf file (other formats will not be accepted) citing the **reference number (1011-3/20)** to the following email-address:

bewerbung@ifw-dresden.de.

The position will remain open until filled.

For further information please contact Dr. Anja Wolter Giraud at a.wolter@ifw-dresden.de.