Dresden University of Technology

The Cluster of Excellence ctd.qmat – Complexity, Topology and Dynamics in Quantum Matter — (www.ctdqmat.de) at Julius-Maximilians-Universität Würzburg and Technische Universität Dresden explores and develops novel quantum materials with tailored properties. Around 300 researchers from over 30 countries work at the interface of physics, chemistry, and materials science to lay the foundations for tomorrow's technologies. In 2026, the cluster entered the second funding period of the German Excellence Strategy of the Federal and State Governments — with an expanded focus on the dynamics of quantum processes.

For TUD Dresden University of Technology diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

At the **Faculty of Physics,** the **Junior Research Group "Quantum Critical Matter"** at the **Institute of** Theoretical **Physics** offers a position as

Research Associate / PhD Student / Postdoc (m/f/x)

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **as soon as possible**. The position is limited to 3 years and comprises 75 % of the fulltime weekly hours (for PhD Students) or full-time to 2 years (for PostDocs). The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG). The position offers the chance to obtain further academic qualification (usually PhD / habilitation thesis).

Tasks: The Junior Research Group "Quantum Critical Matter" studies novel phases and phase transitions in quantum many-body systems. The group is part of the Würzburg-Dresden Cluster of Excellence "Complexity, Topology and Dynamics in Quantum Matter" and the DFG-funded Collaborative Research Center 1143 "Correlated Magnetism: From Frustration to Topology". Possible tasks for this position include the investigation of novel quantum phases in correlated electron systems and frustrated quantum magnets, using numerical or analytical many-body techniques.

Requirements:

- very good university degree in physics or a related area
- interest in problems of theoretical condensed matter
- willingness to collaborate with experimental and numerical groups

More information on the Junior Research Group can be found under https://tu-dresden.de/physik/qcm. If you have questions, please contact Dr. Lukas Janssen via phone +49 351 46336111 or email lukas.janssen@tu-dresden.de.

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The university is a family-friendly university. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

Application: Please submit your detailed application with the usual documents by **April 30, 2026** (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies), preferably via the TUD SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf file to **lukas.janssen@tu-dresden.de** or to:

TU Dresden, Junior Research Group "Quantum Critical Matter", Dr. Lukas Janssen, Helmholtzstr. 10, 01069 Dresden, Germany.

Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

ctd.qmat
Complexity, Topology and Dynamics in Quantum Matter

TUD is a founding partner in the DRESDEN-concept alliance.

DRESDEN concept

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: https://tu-dresden.de/karriere/datenschutzhinweis.