With more than 16,000 students and 3,800 employees, the **Technische Universität Braunschweig** is one of Germany´s leading institutes of technology. It stands for strategic and performance-oriented thinking and acting, relevant research, committed teaching, and the successful transfer of knowledge and technologies to the economy and society. We consistently advocate for family friendliness and equal opportunities.

Our research focuses are mobility, engineering for health, metrology, and city of the future. Strong engineering and natural sciences are our core disciplines. These are closely interconnected with economics, social and educational sciences and humanities.

Our campus is located in the midst of one of the most research-intensive regions in Europe. We work successfully together with over 20 research institutions in our neighborhood as we do with our international partner universities.

Starting from June 1st, 2026, the Faculty of Electrical Engineering, Information Technology, Physics is looking for a

Doctoral Candidate (m/f/d) in the field of Theoretical Physics

(EG 13 TV-L, 75%)

The position is to be filled on a fixed-term basis for a period of 36 month. The successful applicant will be given the opportunity to pursue a doctorate.

The position will be assigned to the Institute of Mathematical Physics at Braunschweig University in the working group of Prof. Christoph Karrasch in collaboration with OPTIMAL. OPTIMAL is a collaborative research initiative, uniting experts in physics, materials science, and optical engineering to explore and manipulate the properties of quantum materials using advanced optical methods.

Your tasks.

- You will carry out research in the area of the project P2 of OPTIMAL *Floquet engineering, dissipation, and cavities using tensor networks*
- You will apply for and work on research projects.
- You will publish research findings and participate in national and international conferences.

Your Qualifications

- You have successfully completed university studies in physics (Master degree or its equivalent).
- The main criterion is excellence and dedication combined with good communication skills (English) and the ability to carry out independent research.
- We expect a background in strongly-correlated condensed-matter systems, computational physics, and preferably prior experience with tensor networks.
- You are flexible, can perform under pressure and work well in a team.
- You are aiming for a doctorate.

We offer

- Work on exciting future-oriented research topics in an inspiring work environment as part of the university community
- Work within an international team of leading scientists and fellow researchers, opportunities for workshops, conferences, and publications
- Pay in accordance with the collective agreement TV-L E13 75% (PhD) with a special payment at the end of the year as well as a supplementary benefit in the form of a company pension, comparable to a company pension in the private sector, including 30 days' vacation per year
- Flexible working and part-time options and a family-friendly university culture, awarded the "Family-friendly university" audit since 2007
- Special continuing education programs for young scientists, as well as other offerings from the Central Personnel Development Department and sports activities.

Further notes

We welcome applicants of all nationalities. At the same time, we encourage people with severe disabilities to apply. Applications from severely disabled persons will be given preference if they are equally qualified. Please attach a proof of disability to your application. We are also working on the fulfilment of the Central Equality Plan based on the Lower Saxony Equal Rights Act (*Niedersächsisches Gleichberechtigungsgesetz*—NGG) and strive to reduce under-representation in all areas and positions as defined by the NGG. Therefore, applications from women are particularly welcome in this case.

The personal data will be stored for the purpose of processing the application. By submitting your application, you agree that your data may be stored and processed electronically for application purposes in compliance with the provisions of data protection law. Further information on data protection can be found in our data protection regulations at https://www.tu-braunschweig.de/datenschutzerklaerung-bewerbungen . Application costs cannot be reimbursed.

How to apply and contact

Applications are accepted only if sent via email only to the specified email address below.

Applications should include:
• A cover letter specifying the position(s) and research area(s) of interest
• Curriculum Vitae including a list of publications (if applicable)
• Academic transcripts
• Contact information for at least two academic references

Questions and Answers

For more information, please call Cornelia Schmidt on +49 (0) 531 391-5201

Deadline for applications is April 1st, 2026

Are you interested? Please send your application preferably via email to **co.schmidt@tu-braunschweig.de**

or via mail to

Technische Universität Braunschweig
Institut für Mathematische Physik
Mendelssohnstraße 3
38106 Braunschweig