



With more than 15,000 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 on 1 April, 2027 or as soon as possible thereafter, the Carl-Friedrich-Gauß-Fakultät, Institute of Analysis and Algebra is looking for a

Research Associate (Doctoral Candidate, m/f/d) in the field of Analysis and Mathematical Physics (EG 13 TV-L, 75% part-time)

The position is fixed-term for a period of three years and is intended for scientific qualification leading to a doctorate. The successful candidate will have the opportunity to conduct independent research and pursue a doctorate. The position is remunerated according to TV-L and includes 30 days of annual leave.

The position is part of a research project funded by the German Research Foundation (DFG) and led by Konstantin Merz. The research lies at the interface of spectral theory, scattering theory, harmonic analysis, and partial differential equations, with a particular focus on Schrödinger operators with scaling-critical potentials as they arise, e.g., in relativistic atomic physics. No teaching duties are planned. Funding is available for participation in conferences and international research visits.

Your qualifications

- You have a very good Master's degree (or equivalent) in Mathematics or a closely related field.
- You have a strong background in mathematical analysis, for example in one or more of functional analysis, spectral theory, partial differential equations, or harmonic analysis.
- Previous experience with fractional Laplacians, Hardy inequalities, or related topics is an advantage, but is not required.
- You have good knowledge of the English language; German is desirable but not necessary.

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. Application costs cannot be reimbursed.

Deadline for applications is October 31, 2026

Please send your application, including CV, certificates, academic transcripts, and a short description of your mathematical background and research interests via email to k.merz@tu-bs.de. Please also provide the contact details of one academic referee. For more information, please write an e-mail to Konstantin Merz at k.merz@tu-bs.de.

Information on data protection

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.