

TUD Dresden University of Technology, as a University of Excellence, is one of the leading and most dynamic research institutions in the country. For TUD 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 Electrical and Computer Engineering, Institute of Communication Technology**, the **Junior Professorship in Quantum Communication** offers a project position as

Research Associate (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 until July 31, 2026. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG).

Tasks: We seek applications for the position in Quantum Technologies for the theoretical and experimental realization of low-latency resilient 5G-quantum campus networks in the framework of the "QD-CamNetz" project. Low latency will be a critical key performance indicator (KPI) in future 6G communication networks. Moreover, the role of campus networks will be pivotal to achieve low-latency communications with the help of Mobile Edge Computing (MEC). In this context, the seamless integration of quantum communication and 5G campus networks will be an important step to achieve the KPIs envisioned by future 6G networks.

The Applicant will focus on the functionalities of the quantum-classical Medium Access Control and link layer protocols and interfaces; will design and realize a precise synchronization of the link layer receiving information from the quantum physics layer; will design and realize efficient and effective quantum-classical network layer protocols and interfaces.

Requirements: university degree (Diploma/Master) in physics, mathematics, electrical and electronic engineering, telecommunications engineering or computer science; knowledge of quantum mechanics and/or network coding is highly recommended; proficient in English and good oral and written communication skills. Former experiences with C/C++ and Python programming languages are also highly recommended.

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified 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.

Please send your application documents by **October 28, 2025** (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 kseniia.lemesheva@tu-dresden.de or to:

TU Dresden, Juniorprofessur für Quanten-Kommunikationssysteme, Herrn Jun.-Prof. Dr.-Ing. Riccardo Bassoli, 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.

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>.