

# Job announcement

The Walther-Meißner-Institut (WMI, <https://www.wmi.badw.de/>) of the Bavarian Academy of Sciences and Humanities (BAdW) is located at the Campus Garching near Munich in Germany and invites applications for

## 3 PhD positions (m/f/d)

### Targeted with the experimental realization of microwave quantum token with quantum memory based on spin ensembles

**The project** is funded by Federal Ministry of Science and Education (BMBF) within the “Grand challenge of quantum communication” call (project QuaMToMe) and aims for the demonstration of the generation and storage of microwave quantum tokens in spin ensemble quantum memories.

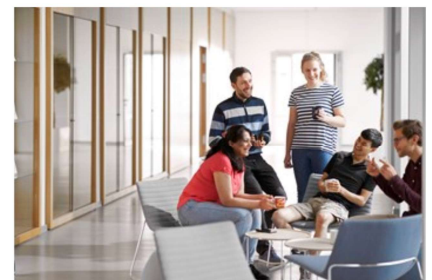
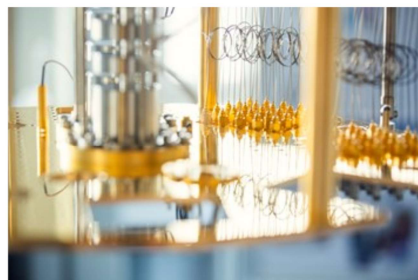
**The positions** are situated in a multidisciplinary collaboration between the partners within the WMI institute. Specifically, we offer three deeply interconnected PhD topics:

- *Quantum memories based on rare earth spin ensembles*
- *Generation of quantum tokens (quantum cryptographic units) using squeezed microwaves*
- *Quantum memories based on spin donors in silicon*

Your work is embedded into the quantum technology efforts formed by the WMI, the Excellence Cluster MCQST (<https://www.mcqst.de/>) and the Technische Universität München (<https://www.tum.de/>). The planned starting date of the project is November 1st, 2021, with the anticipated duration of 3 years. Salary is within the 75% TV-L E13 pay grade.

**You** hold a Master’s degree in physics or a similar field of study with a solid background in solid state and Josephson physics, quantum information, quantum communication, or quantum sensing.

**Application** documents should include your CV, relevant transcripts, and grade reports (master and bachelor, or diploma), and a brief cover letter explaining your motivation. Please send the documents as a single PDF file to Martina Meven ([sekretariat@wmi.badw.de](mailto:sekretariat@wmi.badw.de), please mention the code “2021-QuaMToMe-01” in the subject). The applications are accepted until 31.10.2021.



We are determined to build an inclusive culture that encourages and values the diverse voices of all members of the research team embracing the full diversity of gender identities and cultures. Disabled candidates with equal qualification and aptitude will be given preferential consideration according to the SGB IX. Upon application, you are submitting personal information. We collect and process personal data from your application in accordance with Art. 13 of the General Data Protection Regulation (GDPR). By submitting your application, you confirm that you have acknowledged the above data protection information of the BAdW. (see <https://badw.de/dieakademie/jobs/information-zur-verarbeitung-personenbezogener-daten-nach-dsgvo.html> ).