Job announcement

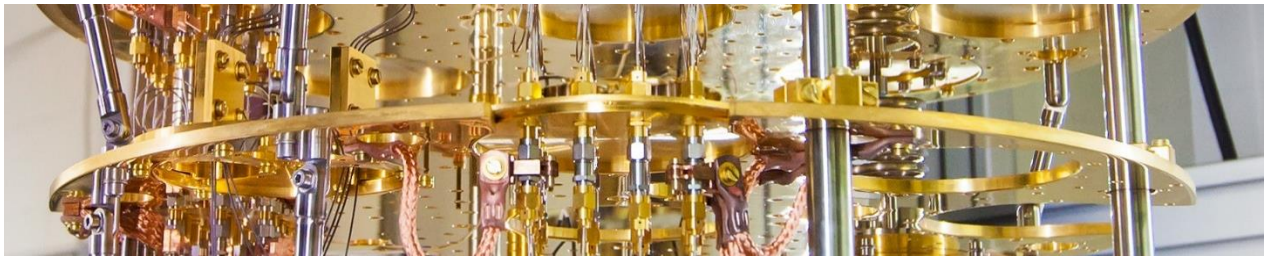
At the Walther-Meissner-Institute (WMI) of the Bavarian Academy of Sciences and Humanities located at the Campus Garching near Munich in Germany we are seeking a

Postdoctoral researcher in experimental quantum computing with superconducting qubits.

The research will be centered around multi-qubit architectures to study fundamental properties of complex quantum systems and their interaction with the environment, to investigate questions on scalability of solid-state quantum computing platforms, to identify designs that allow for interactions tailored to specific quantum algorithms and/or to improve their coherence and controllability. The work is part of the new research group at the WMI led by Stefan Filipp (https://www.wmi.badw.de/filipp/).

We are looking for a highly motivated candidate who is eager to take on responsibility in the design, fabrication and/or characterization of scalable superconducting qubit and hybrid systems. The successful candidate will work within a growing team embedded in the diverse research activities at the WMI (https://www.wmi.badw.de/) on quantum circuits and communication, hybrid quantum devices and magnetic materials at low temperatures as well as in the quantum technology network of the Munich Center for Quantum Science and Technology (MCQST - https://www.mcqst.de/). The quantum activities of the nearby world-class research groups at the TU Munich and the Ludwig-Maximilians-University, of the Max-Planck Institute of Quantum Optics and of the high-performance Leibniz Rechenzentrum provide an ideal environment for basic and applied research on future quantum technologies with close links to several companies operating in this field in the Munich area.

Candidates applying for this position are expected to hold a PhD degree in physics or a similar field of study with a solid background in quantum information processing. The candidate should have proven expertise in the experimental control of systems for quantum information processing at microwave frequencies and cryogenic temperatures including skills in instrumentation and measurement or expertise in micro- and nanofabrication. Prior experience with superconducting quantum circuits is an advantage.



In addition, the following skills are highly desired:

- Expertise in microwave engineering using FEM simulation tools (such as Ansys HFSS).
- Experience in cryogenics and the operation of dilution refrigerators.
- Proficiency in coding of control and analysis software (preferably in Python).
- Ability to conduct independent work and assume responsibility within a larger team.
- Curiosity and eagerness to learn independently about new areas and technologies.
- Strong communication and writing skills.

Diversity

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, cultures and ideologies to do finest research. Disabled candidates with equal qualification and aptitude will be given preferential consideration according to the SGB IX.

How to apply

Candidates are invited to send their application documents to Dr. Stefan Filipp (sfilipp@wmi.badw.de), Professor at the TU Munich and Director of the Walther-Meissner-Institute (starting May 2020). Please send your application documents including your CV, a publication list, relevant transcripts and a brief cover letter explaining your motivation in a single PDF file. Please also provide for a reference letter sent directly to the email stated above. The intended contract duration is 2 years with possibility of extension. The position is available immediately, applications will be taken into further consideration until the position is filled.

Data Protection Information

When you apply for a position with the Bavarian Academy of Sciences and Humanities (BAdW), you are submitting personal information. Please take note of the data protection information on collecting and processing personal data contained in 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. More information can be found at http://badw.de/die-akademie/service-und-jobs.html#c3843.