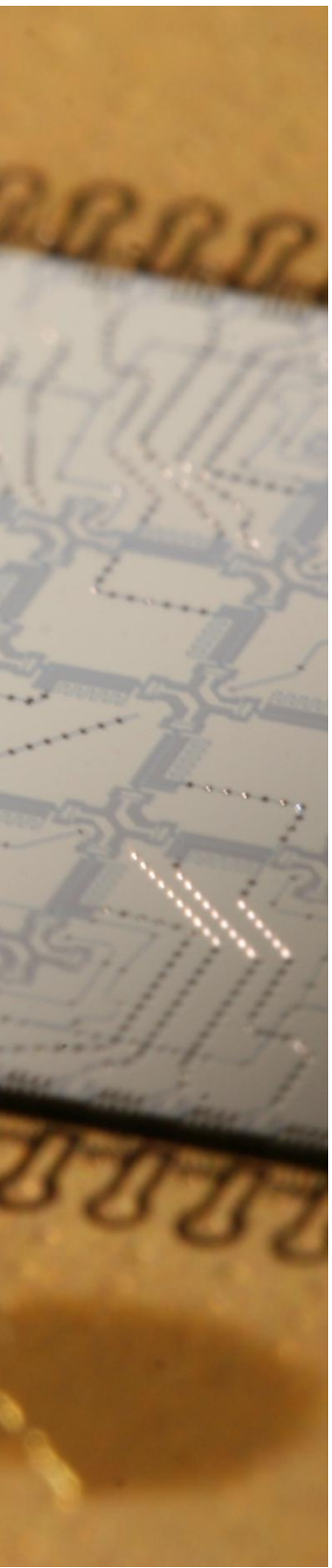
Walther Meißner Institut

Quantum Researcher (PhD) for Superconducting Quantum Computers (m/f/d) (100% full-time position)



Do you want to shape the future of quantum computing? Superconducting quantum processors are scaling fast – and the next leap towards fault-tolerant quantum computing depends on novel approaches for qubits and couplers, new materials and fabrication processes, enhanced connectivity, long-range couplings, improved readout and control, as well as better protection against noise through intrinsically protected systems or improved error-correction codes. To tackle these challenges, we are strengthening our research at the Walther-Meißner-Institute (WMI – wmi.badw.de) of the Bavarian Academy of Sciences and Humanities as part of the Munich Quantum Valley (http://www.munich-quantum-valley.de).

What you will do:

- You will join a growing international team building quantum computers based on superconducting qubits.
- You will drive research in one or more of the following areas:
  - **Fluxonium and other novel qubit types:** design, fabrication and control of alternative qubits for higher noise protection.
  - **Connectivity:** novel long-range coupling architectures beyond nearest-neighbour layouts for denser, more flexible qubit connectivity.
  - **Extended QEC codes:** experimental realisation of quantum error correction codes beyond the surface code (e.g. qLDPC codes) that exploit enhanced connectivity.
  - **Nanotechnology:** novel materials, fabrication processes and 3D integration methods for higher coherence and reproducibility.
  - **Control and Readout optimization:** improved readout schemes, multi-qubit gates, calibration and benchmarking as well as new methods for identifying and mitigating two-level system (TLS) and other types of noise.
  - **Transduction:** coherent microwave-to-optical conversion to network superconducting quantum processors.
- You will work at the interface of fundamental science and technology development, collaborating closely with partners from universities, research institutes and start-ups.
- You will publish your results, present them at international conferences and workshops, and help communicate quantum technology to the public.

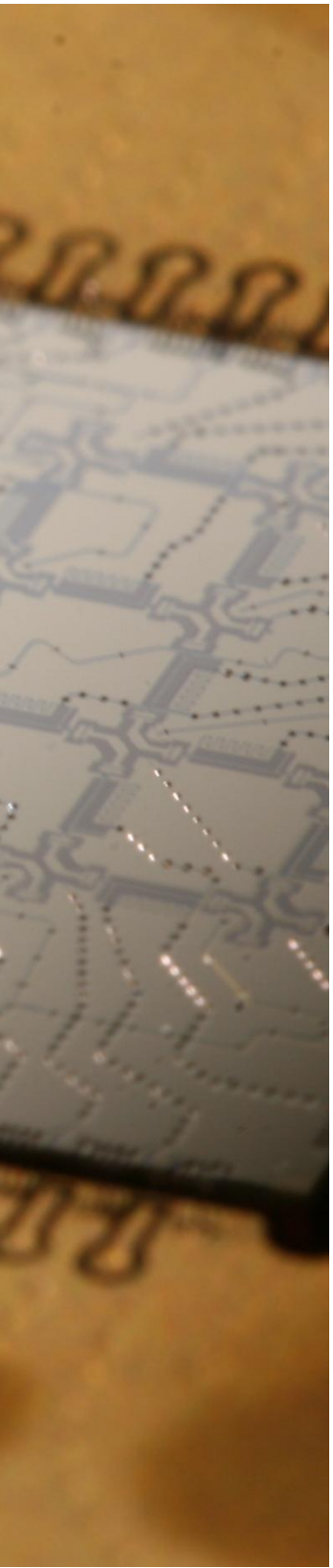
What you bring:

- You hold a Master in physics, electrical engineering, materials science or a related field.
- Experience in one of the fields below is desired:
  - in the design, fabrication and/or control and characterization of superconducting quantum systems.

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  - in microwave measurement, circuit design and/or micro- and nanofabrication – and you enjoy pushing technology to its limits to build high-quality, scalable quantum processors.
  - cryogenic setups and the operation of dilution refrigerators.

- You enjoy the freedom of an academic environment combined with a technology-driven, innovative mindset.
- You have skills in programming, experience with AI, design software
- You communicate clearly and write well in English.



What we offer:

- A curiosity-driven, technology-focused research environment with an international team at WMI working on superconducting quantum circuits, hybrid quantum systems and magnetic materials.
- A workplace on the Garching Research Campus – one of Europe's leading hubs for research and education – with state-of-the-art in-house fabrication and cryogenic infrastructure.
- Close ties to the Munich Quantum Valley connecting you with leading academic and industrial partners and a thriving quantum technology ecosystem (e.g. with the WMI spin-off Peak Quantum).
- Salary in accordance with the collective agreement for the public service of the German federal states (TV-L E13 75%)

How to apply. Ready to advance superconducting quantum computing with us? We look forward to receiving your application by **1 December 2026.** Please send your CV, publication list, your transcript of record, at least one reference letter, and a short motivation letter – telling us which of the research topics above excites you most – to applications@wmi.badw.de. Applications will be considered until all positions are filled.

Diversity. We are determined to build an inclusive culture that encourages and values the diverse voices of all members of our research team embracing the full diversity of gender identities, cultures and ideologies to do excellent research. BAdW strives to raise the proportion of women in their workforce and explicitly encourage applications from qualified women. Disabled candidates with equal qualification and aptitude will be given preferential consideration according to the SGB IX.

Data Protection Information. When you apply for a position with the 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. Please visit https://badw.de/die-akademie/jobs.html or more information.