Postdoctoral researcher position in the Quantum Computing group at IBM Zurich – Research

IBM Research – Zurich is seeking a candidate to work as a postdoctoral researcher on experimental quantum computing and simulation with superconducting quantum circuits in the Quantum Technologies group (https://www.zurich.ibm.com/st/quantum). The focus of the work will be on the development of technologies for the scaling of superconducting qubit quantum computing architectures towards practical systems. We are looking for a person eager to design, fabricate and test circuits for scalable integrated qubit chips or to develop advanced qubit control and calibration methods. The work will be carried out as part of the IBM Q quantum program and European Quantum Technology projects. The successful candidate will work within a growing international research team in close collaboration with leading players in the quantum computing community.

Candidates applying for this position are expected to hold a PhD degree in physics or engineering with a solid background in quantum information processing with superconducting circuits. Applicants at an earlier career stage with a proven skill set relevant to the project may be considered as well. She/he should have either proven experience in performing experiments with superconducting qubit devices including skills in control and measurement automation or expertise in micro- and nanofabrication technologies for scalable systems operating at microwave frequencies and cryogenic temperatures. Ideally, this is paired with expertise in the design and simulation of superconducting microwave circuit.

In addition, the following skills are highly desired:
- Expertise in microwave engineering and the use of microwave simulation tools such as Ansys HFSS.
- Experience in cryogenics and the operation of dilution refrigerators.
- Proficiency in coding (preferably in Python).
- Ability to conduct independent work and assume responsibility as part of a larger team.
- Capability and eagerness to learn independently about new subject area(s) and underlying technologies.
- Strong communication and writing skills.

Diversity
IBM is committed to diversity at the workplace. With us you will find an open, multicultural environment. Excellent flexible working arrangements enable both women and men to strike the desired balance between their professional development and their personal lives.

How to apply
Candidates are invited to send their application documents to
Dr. Stefan Filipp (sfi@zurich.ibm.com)
Technical Leader Quantum Computing
IBM Research – Zurich

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 as well as the name of two further references. This position is available immediately. Applications will be taken into further consideration until the position is filled