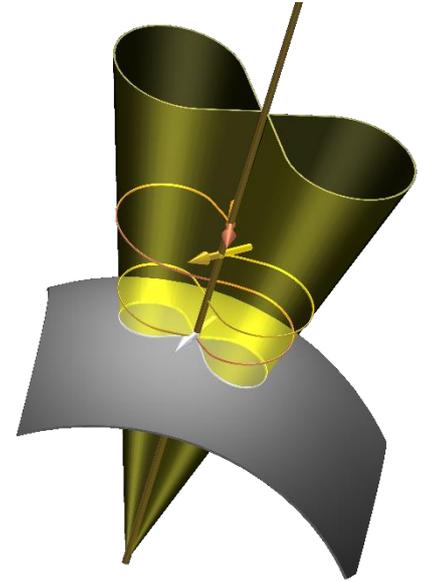


Postdoctoral researcher position

in the Quantum Technology group at IBM Research - Zurich

Project description. Within the Swiss National Science Foundation (SNSF)-funded project 'Exploring Geometric Effects and Geometric Gates with Superconducting Circuits' we are looking for a talented, skilled and highly motivated candidate interested in quantum information science with superconducting quantum devices. The position entails the experimental investigation of two-qubit interactions, in particular those exploiting geometric effects, with superconducting qubits embedded in a planar or three-dimensional circuit quantum electrodynamics (QED) architecture with the goal to realize purely geometric quantum algorithms and investigate the use of geometric phases in quantum simulations.



This project is part of the quantum technology initiative at IBM Research – Zurich, Switzerland aiming towards the realization of a large-scale quantum information processor, and is carried out in collaboration with the Quantum Device Lab headed by Prof. Andreas Wallraff conducting a wide range of activities in the field of quantum optics and information processing with superconducting circuits.

Requirements. The candidate must have a PhD in quantum physics ideally with a solid background in quantum information processing ideally with a particular focus on superconducting circuits. The successful candidate is curious to learn new experimental techniques and is eager to expand his current expertise in microwave engineering, signal processing, nano- and micro-fabrication, low-temperature physics, control and measurement automation or data analysis (Mathematica, Matlab, Python, etc...).

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.

Application. This position is available immediately for a duration of initially 18 months. The successful candidate will enjoy an internationally competitive salary and work within a growing research team focused on quantum information processing.

To apply for the position please send your CV, a publication list, a statement of research interests, including a short description of your background, motivation and skills (max. 2 pages), and the names of three references to Stefan Filipp (sfi@zurich.ibm.com). Please also arrange for one letter of reference to be sent directly by email to the above address. Consideration of applications will begin immediately and will continue until the position is filled.

