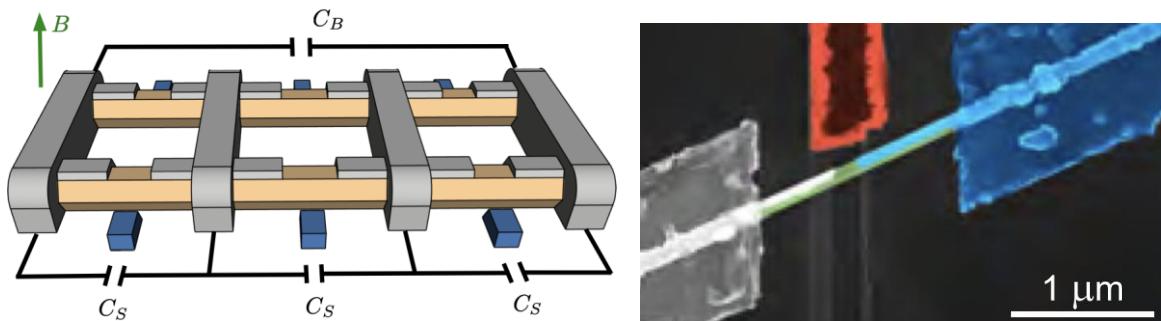




Masters Project in QDev:

Single-mode SQUIDs for parity protected qubits

A new Masters Project to experimentally investigate how superconducting quantum interference devices (SQUIDs) functions with quantized conductances in their arms work. The goal to continue our investigation of protected qubits based on superconductor-semiconductor SQUIDs. The project involves design, fabrication, and measurement of these structures at millikelvin temperatures in collaboration with PhD students, postdocs, and faculty. Read more about the experiment here: <https://arxiv.org/abs/2004.03975>.



Some background in condensed matter physics will help with reading, but more important is a hands-on approach in the lab. If you find the challenge of making and measuring qubits interesting, come join QDev.

You will learn the physics of semiconductors, superconductors, and qubits. Work with the best equipment in condensed matter physics on a problem that the world cares about. Discuss physics and quantum information technology with colleagues and faculty, become an experimental scientist.

If you are interested, contact **Morten Kjaergaard** (mkjaergaard@nbi.ku.dk) or **Charles Marcus** (marcus@nbi.dk).