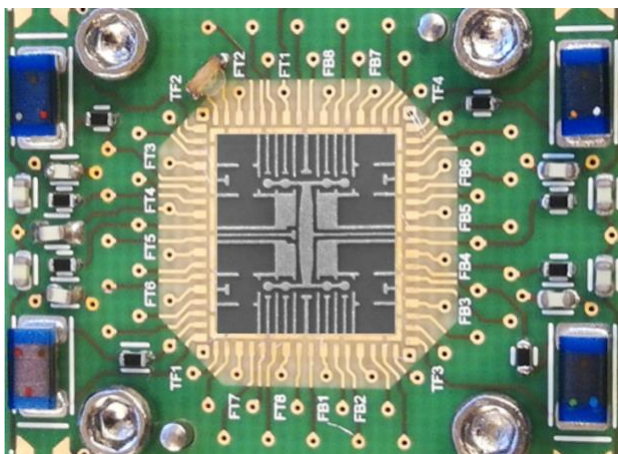


PhD fellowships in experimental quantum simulation

Niels Bohr Institute, Faculty of Science, University of Copenhagen

We seek outstanding candidates for two PhD positions to work on experimental condensed matter quantum-simulation platforms at the Center for Quantum Devices, Niels Bohr Institute, University of Copenhagen.

The projects are part of a new research program on solid-state quantum simulators. Further information can be found here, at the Center for Quantum Devices: <https://qdev.nbi.ku.dk>.



Applicants should hold a master's degree or a US undergraduate degree in Physics, Applied Physics, Nanoscience or related fields with relevant experimental experience, ideally including published research.

The projects focus on the experimental development and operation of solid-state quantum devices for applications in quantum simulation. Research may involve materials development, semiconductor growth by molecular beam epitaxy, electron microscopy, nanofabrication, high-frequency measurements in cryofree dilution refrigerators, advanced signal generation and detection, data analysis, interaction with theoretical physicists, and scientific writing.

Each project will either mainly focus on advancing and operating existing quantum-dot circuits, or on developing suitable new materials and fabrication techniques, depending on the candidate's qualifications. We welcome applicants with backgrounds from physics, applied physics, nanoscience, engineering or materials science.

The starting date is as soon as possible but can be negotiated.

Inquiries about the positions can be made to **Professor Jesper Nygård** (nygard@nbi.ku.dk) and Associate Professor **Ferdinand Kuemmeth** (kuemmeth@nbi.dk)

Application deadline: 28 February 2021, 23:59 GMT +1

