Plenum talk, Associate Professor Morten Kjærgaard, NQCP & Niels Bohr Institute, KU

”Fault-tolerant Quantum Computing”

Abstract:
The Novo Nordisk Foundation Quantum Computing Programme (NQCP) is on a mission to enable the realisation of a fault-tolerant quantum computer and develop its applications. In this talk I will give a high level introduction to the programme, our approach and give early technical examples of how we are working on this ambituous goal. NQCP combines research and engineering in a data-driven project-based framework that enables cross-stack collaboration from fundamental materials R&D to advanced quantum processor design, sophisticated qubit control and processor-scale benchmarking. We are working on multiple chip-based quantum computing technologies and I will discuss early work particularly focused on superconducting qubits at NQCP.