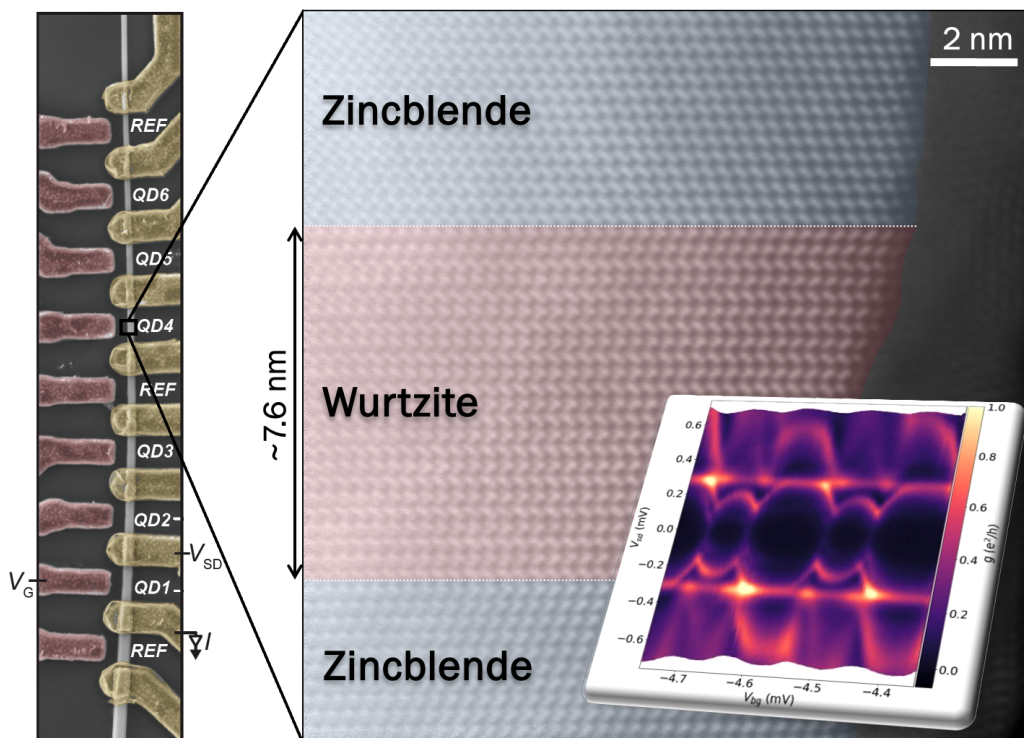


Masters project in QDev:

Crystal structure defined quantum dots

A new Masters project focusing on the experimental investigation on arrays of crystal phase defined quantum dots connected by superconductors is available in the Center for Quantum Devices (QDev). You will build and measure nanowire-based quantum devices at sub-kelvin temperatures to investigate how different crystal phases (wurtzite/zincblende) create potential wells which can trap single electronic states. In these devices you will discover, for instance, how two of these states interact or how they couple to superconductors. Read about related experiments here: <https://arxiv.org/abs/2111.00651>.



You will be taught how to work as an experimental condensed matter physicist and use state-of-the-art techniques such as nanolithography, low-temperature measurements and electron microscopy. If this sounds interesting contact **Jesper Nygård** (nygard@nbi.ku.dk) or **Joachim Sestoft** (joachim.sestoft@nbi.ku.dk).