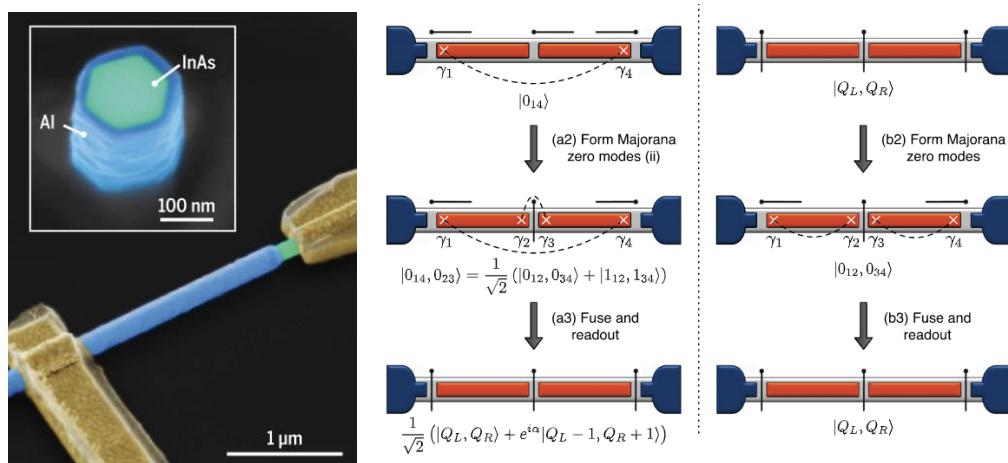




## Masters Project in QDev: Topological Full-shell nanowires

A new Masters Project to make a topological qubit based on a full-shell semiconductor nanowire is available at the Center for Quantum Devices. The full-shell nanowire can be thought of as a superconducting vortex trapped in a wire. You can read more here: <https://arxiv.org/abs/2003.13177>. In brief, in the presence of spin orbit coupling, this system can exhibit signatures of a topological phase. The project involves design, fabrication, and measurement of these structures at millikelvin temperatures in collaboration with PhD students, postdocs, and faculty.



You will learn the physics of semiconductors, superconductors, nanowires, nanofabrication, topological states, and Majorana zero modes. Work with the best equipment in condensed matter physics on a problem that the world cares about. Discuss physics with colleagues, become an experimental scientist.

To learn more, contact **Charles Marcus** ([marcus@nbi.dk](mailto:marcus@nbi.dk)).