Masters Project in QDev: Quantum Hall Interferometry

A new Masters Project to experimentally investigate thermal transport in quantum Hall systems is available in the Center for Quantum Devices. The project aims to understand some subtle aspects of exotic carriers in the fractional quantum Hall regime, where excitations are neither fermions or bosons, but anyons with fractional or even nonabelian (braiding) statistics. You can read about a related experiment here: [https://arxiv.org/abs/2006.14115](https://arxiv.org/abs/2006.14115). This will introduce the problem.

Some background in condensed matter physics will help with reading, but more important is a hands-on approach in the lab.

You will learn the physics of semiconductors, integer and fractional quantum Hall effect, low-temperature physics, and of course scientific reading and writing. Work with the the best equipment in condensed matter physics on a problem that the world cares about. Discuss physics with colleagues, become an experimental scientist.

If this sounds interesting contact Charles Marcus ([marcus@nbi.dk](mailto:marcus@nbi.dk)) or Anasua Chatterjee ([anasua.chatterjee@nbi.ku.dk](mailto:anasua.chatterjee@nbi.ku.dk)).