



# Master's Project: Characterisation of Ge/Si Core–Shell Nanowires for Quantum Devices

We invite a highly motivated Physics or Nanoscience student to join our team working on **Ge/Si Core/Shell nanowires**, a promising platform for **hole spin qubits**.

You will:

- Support **nanofabrication** of nanowire devices.
- Perform **low-temperature transport measurements** to estimate **mobilities** and try to improve them [Fig 1].
- Potentially build **qubits** from the **low disorder/high mobility NWs** [Fig 2].

Through this project, you'll gain hands-on experience in **quantum transport, quantum dots, spin qubits, cryogenics, low noise electronics and nanofabrication** — key skills for building **quantum computers**.

You will join a collaborative, interdisciplinary research team working on **semiconductor quantum devices**. The project will be well supported by experienced researchers in nanofabrication, measurement techniques, and quantum theory. Prior experience with nanofabrication or low-temperature measurements is a plus, but not required — curiosity and enthusiasm are what matter most!

For more information contact,

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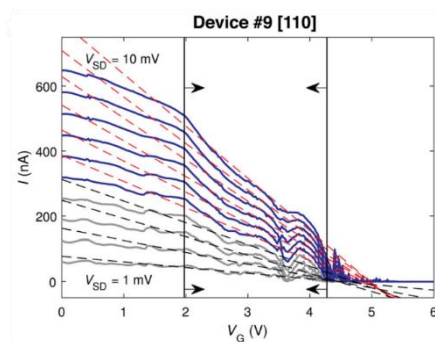


Figure 1

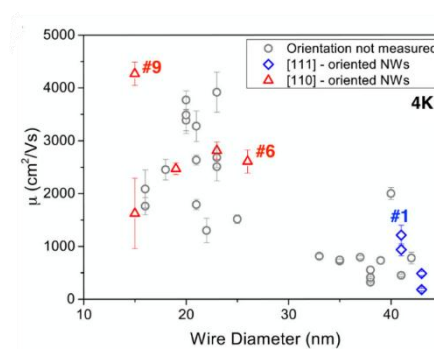


Figure 2

S. Conesa-Boj et al., Nano Lett. 2017, 17, 4, 2259–2264