

1 Academic report

I have greatly enjoyed my first year in the CDT, I like the cohort structure and feel that I have gained a lot from sharing an office with the others. This year I have:

- taken a number of quantum information and quantum optics taught modules.
- been involved with an experimental group project and successfully achieved a HOM dip in a bulk optics lab which was new to me.
- written a literature review on nonlinear optics and continuous variable quantum computing as part of the quantum device engineering module
- completed my project A - Practical quantum circuits for the Schur transform with Peter Turner
- attended two science festivals to do public outreach

I am now working on my individual project B - Gaussian Quantum Information Techniques for Modeling the Generation of Large Entangled Photonic States in Realistic Settings with Will and Dara McCutcheon. We are currently working on a quantum programming guide book for the cohort project.