



# Practical defence for securing quantum communication systems



*An exploration into the quantum cryptographic world of Alice, Bob, and Eve*

Quantum cryptography (QC) is one of the most promising applications of quantum information technology. Organizations ranging from small startups to large companies across the world are now involved in the QC business.



## Want to join the quantum revolution?

We are offering a project that aims to explore practical defence mechanisms for securing real implementations of QC against a malicious eavesdropper. The main task is to build and characterize a novel security device that can protect physical quantum cryptographic implementations (including our in-house QC system) against various potential hacking attacks.

## Who we are & what we offer:

We are an experimental group working at the forefronts of quantum physics and information technology. Our work on topics such as quantum state engineering, quantum sensing, solid state quantum systems, and quantum information processing, spans various disciplines ranging from optics to electronics, fabrication to cryogenics. We offer a vibrant and fun work environment. See [www.fysik.dtu.dk/english/Research/QPIT](http://www.fysik.dtu.dk/english/Research/QPIT) for more.

## Requirements etc.:

- Basic training in electronics and circuit design.
- Some optical lab experience would be great but not essential.
- Background in machine learning would be an added plus.
- *Knowledge of quantum physics is not necessary!!*
- Lots of enthusiasm and curiosity!!!

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