

**Title: Science, Excitement and Challenges of Distributing Entanglement over a Quantum Network**

**Abstract**

Using the definition that a quantum network is one that can distribute entanglement between stationary qubits, I will give an overview of the science underlying, some of the proposed applications to motivate, and the main challenges facing, quantum networking. I will end with an audience participatory discussion of the most likely applications of quantum networking – please bring your thoughts!