



To: Professor Mark Coffey

From: Brennan Fieck

Subject: Term Project Proposal

Date: March 7, 2017

For my term project I'd like to cover the basics of quantum cryptography, its possible implementations, considerations and vulnerabilities. In the first two weeks, I'd focus primarily on mechanisms for manipulating quantum data to accomplish certain cryptographic tasks (e.g. handshake protocols) from a purely theoretical point of view. For the following two weeks I would research particular implementations - both proposed and attempted - of these mechanisms. Finally, for the remaining two weeks (giving myself a week for editing and review) I would study the plausibility and implications of such designs, as well as evaluate their respective weaknesses and/or vulnerabilities and any considerations that would need to be taken in their implementation. As of this moment, I also intend the form of my report to follow this format.