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## An introduction to quantum cryptography

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The premise of quantum cryptography is to make use of quantum mechanical principles in order to carry out cryptographic protocols. The term quantum cryptography is often interchanged with the term quantum key distribution, which guarantees the construction of a shared, unbreakable private key between two communicating parties. In this talk, I will be exploring the many concepts in quantum cryptography and the founding ideas of quantum mechanics. I will also investigate various notions from quantum information science; namely quantum computation and I will discuss its links to classical computation.

### Biography

Waqas Rasul is a final year undergraduate mathematics student at Nottingham Trent University. His interests extend to mathematical aspects of quantum mechanics and numerical mathematics. He hopes to continue postgraduate studies related to quantum mechanics.

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