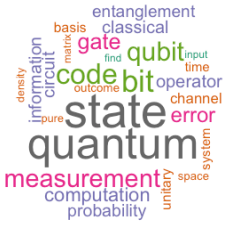


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# Quantum Information for Fundamental Physics

*Thursday, 7 December 2017 10:00 (1 hour)*

The tried-and-true method for probing fundamental physics is to measure scattering probabilities with colliders. Recent advances in quantum information-based theory and experimental technologies suggest new methods for understanding elementary physics. In this vein, I will discuss some results on the quantum structure of scattering states, and sketch some preliminary ideas about trying to use novel information-theoretic observables and techniques to explore fundamental theories at energies accessible in labs today.

**Presenter:** Dr CARNEY, Daniel (NIST / University of Maryland)