## NATALIE MULLIN,

Uniform Mixing in Association Schemes

Continuous-time quantum walks were introduced by Farhi and Gutmann in 1998 as a quantum analogue of classical random walks. In this talk we investigate mixing properties of continuous-time quantum walks from an algebraic perspective. Using the framework of association schemes, we construct families of graph that admit uniform mixing. In contrast, we show that cycles of prime length greater than three never admit uniform mixing.