1146-05-179 Sarah Plosker* (ploskers@brandonu.ca), Brandon, Manitoba, Canada. Perfect Quantum State Transfer in Hypercubes and Perturbations of Hypercubes.

Perfect quantum state transfer is a desirable property to achieve within a quantum system in quantum information theory. This can be analyzed by considering the adjacency matrix or Laplacian matrix of a graph, and in this talk we focus on the hypercube graphs and various perturbations of hypercubes, using techniques from graph theory, combinatorics, and matrix theory. (Received January 21, 2019)