

---

**AYSA TAJERI**, York University

*Pretty good state transfer on cycles*

H. Pal and B. Bhattacharjya have proved, using the adjacency matrix, that the continuous-time quantum walk of a cycle  $C_n$  admits pretty good state transfer if and only if  $n = 2^k$ .

The exponential distance matrix of a graph is defined entry-wise by letting the  $(u, v)$ -entry be  $q^{\text{dist}(u,v)}$  for some parameter  $q$ . Using exponential distance matrix as the Hamiltonian of the walk, we show that all the even cycles admit pretty good state transfer.