1116-05-926 **Ethan Ackelsberg**, **Zachary Brehm**, **Ada Chan**, **Joshua Mundinger** and **Christino Tamon*** (tino@clarkson.edu), Dept. Computer Science, Clarkson University, 8 Clarkson Avenue, Potsdam, NY 13699-5815. *Quantum State Transfer in Corona Products.*

A continuous-time quantum walk on a graph G is given by the time-varying unitary matrix $U(t) = \exp(-itM)$, where M is a Hermitian matrix associated with G. We say such a quantum walk has state transfer between vertices u and v at time τ if the (u, v) entry of $U(\tau)$ has near unit magnitude. This notion was motivated by applications of quantum information transmission in spin networks. We show new constructions of graphs with state transfer using the Frucht-Harary corona product. Our results exploit the spectral properties of the underlying graphs. (Received September 15, 2015)