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Mohamad Abdallah* (mkabdall@oakland.edu) and **Eddie Cheng**. *Fault-Tolerant Hamiltonian Connectivity of 2-Tree Generated Networks*.

In this paper we consider a class of Cayley graphs that are generated by a certain 3-cycles on the alternating group A_n . These graphs are generalizations of the alternating group graph AG_n . We look at the case when the 3-cycles form a 2-tree, and analyze the fault-tolerant Hamiltonian connectivity of such graphs. We prove that these graphs are $(2n - 7)$ -fault-tolerant Hamiltonian connected. (Received January 15, 2015)