

Hamiltonian Properties of Generalized Halin Graphs

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Abstract. A Halin graph is a graph $H = T \cup C$, where T is a tree with no vertex of degree two, and C is a cycle connecting the end-vertices of T in the cyclic order determined by a plane embedding of T . In this paper, we define classes of generalized Halin graph, called k -Halin graphs, and investigate their Hamiltonian properties.

Keywords: *k -Halin Graph, Hamiltonian, Hamiltonian connected, traceable.*