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Bing Wei* (bwei@olemiss.edu), Department of Mathematics, University of Mississippi, Hume 310, University, MS 38677. *On k -ordered hamiltonian connectivity of graphs.*

A graph G is said to be k -ordered hamiltonian connected if for every ordered set of k -vertices $S = \{v_1, v_2, \dots, v_k\}$ with $k \leq n$, G contains a $v_1 - v_k$ hamiltonian path P encountering S in the given order. We will present a new sufficient condition on the minimum degree sum of any two non-adjacent vertices to ensure the graph to be k -ordered hamiltonian connected. Our result generalizes several related results known before. This is a joint work with Emlee Nicholson. (Received September 19, 2007)