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Ron J. Gould (rg@mathcs.emory.edu), Dept. of Mathematics & Computer Science, Emory University, Atlanta, GA 30322, Jeffrey S. Powell* (JSPOWEL1@samford.edu), Dept. of Mathematics & Computer Science, Samford University, 800 Lakeshore Drive, Birmingham, AL 35229, and Thor Whalen (thorwhalen@gmail.com), Methodic Solutions, Atlanta, GA. A New Ore-Condition for H-linked Graphs. Preliminary report.

Let H be a graph on k vertices. Informally, a graph G is H-linked if there exists a subdivision of H on any subset of k vertices of G. For certain graphs H, a graph G is H-linked if and only if G has a certain graph property (such as k-connected or k-ordered). Hence, the concept of H-linked generalizes many well-known graph properties. In 2005, Kostochka and Yu proved a sharp Ore-type condition for a graph G to be H-linked where $\delta(H) \geq 2$. In this talk, we present a similar best-possible Ore-type condition for a graph G to be H-linked where now G must be sufficiently large but H has no minimum degree restrictions. Several new results will be presented as corollaries. (Received September 23, 2006)