1047-05-244 Ken-ichi Kawarabayashi and Gexin Yu* (gyu@wm.edu), Department of Mathematics, College of William and Mary, Williamsburg, VA 23185. *Graph Minors and graph linkages*. Preliminary report.

A graph G contains a graph H as a subdivision if there exists a subgraph of G isomorphic to a subdivision of H. A graph G is said to be H-linked if every injective mapping from the vertices of H to the vertices of G can be extended to an H-subdivision, where the edges of H are associated with internally vertex disjoint paths of G. For a graph H with k edges, H-linked graphs generalize the notions of k-linked, k-ordered and k-connected graphs.

It is well-known that if a graph is 2k-connected and has certain dense minors, then it is k-linked. In this talk, we will follow this kind of idea to explore conditions for a graph to be H-linked when H contains few edges. This is a joint work with Ken-ichi Kawarabayashi. (Received January 29, 2009)