Michael Ferrara* (michael.ferrara@ucdenver.edu), Michael Jacobson and Florian Pfender. Degree Conditions for $H$-Linked Digraphs.

Given a digraph $H$, an $H$-subdivision is any simple graph obtained by replacing each arc $uv$ of $H$ with a (directed) $u-v$ path of arbitrary length. A directed graph $D$ is $H$-linked if every injective function $f : V(H) \to V(D)$ extends to an $H$-subdivision in $G$. The $H$-linkage property has been well-studied in undirected graphs, and in both the directed and undirected case generalizes the notions of $k$-linked and $k$-ordered (di)graphs. Here, we give sharp degree-sum and minimum semi-degree conditions that assure a digraph $D$ is $H$-linked for arbitrary $H$. This extends recent results of Kuhn and Osthus on $k$-linked and $k$-ordered graphs. (Received September 06, 2010)