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**Louis DeBiasio** and **Robert Krueger\***, kruegera@miamioh.edu, and **Dan Pritikin** and **Eli Thompson**. *Hamiltonicity in  $k$ -Partite Graphs*. Preliminary report.

Chen, Faudree, Gould, Jacobson, and Lesniak determined a minimum degree threshold for which a balanced  $k$ -partite graph has a Hamiltonian cycle, extending a result of Moon and Moser about Hamiltonian cycles in balanced bipartite graphs. However, when  $k \geq 3$  a  $k$ -partite graph is not necessarily balanced. We determine some minimum degree thresholds for Hamiltonian cycles in ‘not-too-unbalanced’  $k$ -partite graphs which are asymptotically tight. We use stability techniques to show that a graph obeying the degree conditions is either a robust expander, or else has a Hamiltonian cycle directly. (Received February 03, 2017)