1138-05-83   **Theodore Molla** and **Michael Santana*** (`santanmi@gvsu.edu`). *Extending a result of Corrádi and Hajnal.* Preliminary report.

In 1963, Corrádi and Hajnal verified a conjecture of Erdős by showing that every n-vertex graph G, where $n \geq 3k$ and $\delta(G) \geq 2k$, contains k vertex-disjoint cycles. This result is best possible in multiple senses and has been the inspiration for a wide variety of research in the area of cycle structure. One particular extension by Balogh, Molla, and Sharifzadeh, shows that in the case where G is dense (i.e., $n = 3k$ and is sufficiently large), the bound on the minimum degree can be significantly improved, provided that the independence number of the graph is small. In this talk, we will present a similar result for the 'sparse' case. This is joint work with Theodore Molla. (Received January 31, 2018)