

1116-VF-668

Theodore Molla, Michael Santana* (santana@illinois.edu) and **Elyse Yeager**.

Refinements of results on cycles and chorded cycles.

Erdős conjectured that every graph on at least $3k$ vertices with minimum degree at least $2k$ contains k vertex-disjoint cycles. Proven by Corrádi and Hajnal in 1963, this result has been the impetus of various research including graph factors, equitable colorings, and tilings. Recently, Kierstead, Kostochka, and Yeager proved a refinement of Corrádi and Hajnal's theorem which characterizes graphs on at least $3k$ vertices and minimum degree $2k - 1$ that do not contain k vertex-disjoint cycles.

In this talk, we present an analogue of the Kierstead, Kostochka, and Yeager result for chorded cycles. This in turn refines previous results of Finkel and Chiba et al. (Received September 10, 2015)