Winter Colloquium Series

Characterizing Graphs without Disjoint Chorded Cycles

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Abstract:

In this talk all the necessary definitions and notation will be presented and very little graph theory knowledge will be assumed. In 1963, Corrádi and Hajnal proved a conjecture of Erdős showing that every graph G on at least $3k$ vertices with $\delta(G) \geq 2k$ contains k disjoint cycles. This result was extended by Enomoto and Wang, who independently showed that graphs on at least $3k$ vertices with minimum degree-sum at least $4k - 1$ also contain k disjoint cycles. Both results are best possible, and recently, Kierstead, Kostochka, Molla, and Yeager characterized their sharpness examples. In this talk we will consider analogues for chorded cycles. In particular, we will discuss our proof of a chorded cycle analogue to the result of Kierstead et al. This is joint work with Theodore Molla and Elyse Yeager.

Monday, February 15, 1:00 - 1:50pm in 3-1637