Combinatorics Seminar

Tuesday, Sept. 14, 2004

3:00pm in Hume 331

(Refreshment will be served at 2:30pm in Hume 307)

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Triads in 3-connected matroids

ABSTRACT

Vertices of small degree play a very important role in the study of minimally k-connected graphs. Similarly, small cocircuits are central in the study of matroids with some extremal k-connectivity property. Unfortunately, for matroids, results are known only for k equal to 2 or 3. In this talk, we present some bounds for the number of triads and for the number of elements covered by triads in a 3-connected matroid with few superfluous elements. (An element e of a 3-connected matroid M is said to be superfluous provided $M\backslash e$ is 3-connected. Therefore a minimally 3-connected matroid has no superpluous elements.)