

Graphic and almost-graphic matroids

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Date: Wednesday, 20 November 2013

Time: 3:45-4:45pm*

Location: Chauvenet 110

Abstract: This talk has two parts. In the first part, a new characterization of graphic matroids is given. In particular, it is shown that a binary matroid is graphic if and only if it does not have four circuits that interact in a particular way. The second part of the talks looks at almost-graphic matroids, which are those matroids that are not graphic, but eliminating any single element, by either contraction or deletion, produces a graphic matroid. It is shown that any regular, almost-graphic matroid is delta-wye reducible to one particular matroid. A gentle introduction to matroid theory will be provided.

*The talk will be preceded by tea and cookies starting at 3:30pm.