1025-05-183   **Daniel Slilaty*** (`daniel.slilaty@wright.edu`). *Regular excluded minors for the class of signed-graphic matroids.*

Graphic matroids are a well-studied and understood class of matroids. They are especially important in the study of the broader class of regular matroids. Seymour proved in 1980 that every regular matroid is built by pasting together graphic matroids, cographic matroids, and copies of a certain 10-element matroid together along small separations. The proof of Seymour's result uses the list of excluded minors for the class of graphic matroids.

Signed-graphic matroids are a generalization of graphic matroids and they have been receiving much attention in the mathematical literature as of late. They are conjectured to decompose the class of dyadic matroids in much the same way as graphic matroids decompose the class of regular matroids. A proof of such a result would probably need to use the list of excluded minors for the class of signed-graphic matroids. In this talk we will present the complete list of excluded minors for the intersection of the class of signed-graphic matroids and the class of regular matroids. We will also talk further about the full list of excluded minors for signed-graphic matroids. (Received January 22, 2007)