Andrew Berget and Alex Fink* (arfink@ncsu.edu). *Matroids and stabilization of K-polynomials.

A full-rank $r \times n$ matrix, read columnwise, gives a configuration of $n$ points spanning $\mathbb{P}^{r-1}$. The matrices yielding the same configuration, up to automorphisms of $\mathbb{P}^{r-1}$, can be considered to form a torus orbit in a Grassmannian, or a $GL_r$ cross torus orbit in the affine space of matrices.

Speyer showed that the equivariant K-class of closures of the former orbits depends only on the matroid of the point configuration. In joint work with Andrew Berget, we have lifted this to orbit closures of the latter kind. I will present this result with a focus on the key idea involved in the lifting, a generalization of a stabilization technique for cohomology used by Fehér and Rimányi. (Received February 08, 2013)