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Alex Fink* (arfink@ncsu.edu) and **Felipe Rincon** (e.f.rincon@warwick.ac.uk). *The tropical Stiefel map and hyperplane arrangements*. Preliminary report.

The Stiefel map is the map from a matrix to its vector of maximal minors, whose image is the Grassmannian in its Plücker embedding. Tropically, though, the image of the Stiefel map is not the whole Grassmannian, i.e. some Plücker vectors do not arise from matrices. The tropical Stiefel image is covered by a collection of affine patches related to the support sets of Sturmfels and Zelevinsky; there are implications for the combinatorics of tropical hyperplane arrangements. Time permitting, we may discuss the topology of the image. (Received September 23, 2012)