

1116-VF-2418 **Dennis Hall*** (dennis@dennishall.net). *Unavoidable Minors for 2-connected k -hypergraphs*. Preliminary report.

It is well known that, for any integer n greater than one, there is a number r such that every 2-connected simple graph with at least r edges has a minor isomorphic to an n -edge cycle or $K_{2,n}$. This result was extended to matroids by Lovasz, Schrijver, and Seymour who proved that every sufficiently large connected matroid has an n -element circuit or an n -element cocircuit as a minor. An analogous result for k -polymatroids has been partially developed, but lacks an explicit description of the minors in all cases except for when $k = 2$. However, an explicit description is possible for 2-connected k -hypergraphs. In this talk, we use results on polymatroids to provide a list of unavoidable minors for 2-connected k -hypergraphs. (Received September 22, 2015)