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Dennis W Hall* (dennis.hall@angelo.edu), Angelo State University, Station #10900, San Angelo, TX 76909. *Unavoidable Minors for 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 July 18, 2017)