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Emily Marshall* (marshalle@arcadia.edu). *Vertex splits and minor-free families of graphs*. Preliminary report.

Splitting a vertex of a graph is a way of reversing the edge contraction operation used in minors. Splitter theorems describe initial families of graphs from which nice families can be generated by repeated vertex splits; Seymour's splitter theorem for 3-connected graphs is one of the best known examples. Such theorems are common tools for generating families of graphs with an excluded minor. In this talk, we discuss minor-free families of graphs generated using splitter theorems. In particular, we describe 4-connected planar DW_6 -minor-free graphs. (Received July 23, 2017)