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Carolyn Chun and **James Oxley*** (oxley@math.lsu.edu). *Bipartite minors of binary matroids*. Preliminary report.

A binary matroid M is affine if all of its circuits have even cardinality. Thus the cycle matroid of a graph G is affine if and only if G is bipartite. Recently, Chudnovsky, Kalai, Nevo, Novik, and Seymour introduced the notion of bipartite minors for graphs and proved that a bipartite graph is planar if and only if it does not have $K_{3,3}$ as a bipartite minor. This talk will extend the definition of bipartite minor to binary matroids. For a binary affine matroid, we characterize, in terms of excluded bipartite minors, when M is graphic and when M is cographic. In addition, we extend Seymour's decomposition theorem for regular matroids to binary affine matroids that are regular. (Received February 11, 2018)