Carolyn Chun\* (chchchun@gmail.com), John Crank 408, Brunel University London, Uxbridge, UB8 3PH, United Kingdom, and Dillon Mayhew and James Oxley. A splitter theorem for internally 4-connected graphs.

Tutte proved that every 3-connected graph that is not a wheel has an edge whose deletion is 3-connected or whose contraction is 3-connected. Seymour showed that, in addition to preserving 3-connectivity, removing an edge in the right way will preserve a pre-selected minor, as long as the minor is not a wheel. In this talk, we discuss these fundamental inductive tools and present analogues for internally 4-connected graphs. (Received September 12, 2014)