1046-05-1946   **Carolyn B Chun*** (`cchun1@lsu.edu`), Mathematics Department, Louisiana State University, Baton Rouge, LA 70803, **James Oxley** (`oxley@math.lsu.edu`), Mathematics Department, Louisiana State University, Baton Rouge, LA 70803, and **Dillon Mayhew**. *A Deletion-Contraction Theorem for Internally 4-connected Graphs.*

Tutte's Wheels Theorem asserts that, for a 3-connected graph G, there is an edge e in G such that the deletion or contraction of e from G is 3-connected and simple unless G is a wheel. In this talk, we present a similar result for internally 4-connected graphs. This theorem is a special case of a more general result for binary matroids. (Received September 16, 2008)