

1067-05-1190

**Carolyn Chun\*** ([carolyn.chun@vuw.ac.nz](mailto:carolyn.chun@vuw.ac.nz)), MSOR, PO Box 600, Wellington, 6140, and **Dillon Mayhew** ([chchchun@gmail.com](mailto:chchchun@gmail.com)) and **James Oxley**. *Towards a splitter theorem for internally 4-connected binary matroids*. Preliminary report.

In 1980, Seymour proved that, for a 3-connected matroid  $M$  with a 3-connected proper minor  $N$ , there is an element  $e$  in  $E(M)$  such that  $M/e$  or  $M \setminus e$  is 3-connected and has a minor isomorphic to  $N$  unless  $N$  is a wheel or a whirl. This splitter theorem is an invaluable tool and we would like to obtain a corresponding result for internally 4-connected binary matroids. In this talk, we indicate how to construct all such matroids and we describe progress towards a splitter theorem for these matroids. (Received September 20, 2010)