

1037-05-297

**Loni Delaplane\*** (lonidelaplane@gmail.com), **Talmage James Reid**, **Haidong Wu** and **Xiangqian Zhou**. *On Minor-minimally 3-connected Binary Matroids.*

A matroid  $M$  is called *minor-minimally 3-connected* if  $M$  is 3-connected and, for each  $e \in E(M)$ , either  $M \setminus e$  or  $M/e$  is not 3-connected. Wagner proved a chain theorem for minor-minimally 3-connected graphs. He also conjectured that the graph result could be generalized to minor-minimally 3-connected matroids. In this paper, we confirm Wagner's conjecture for the class of minor-minimally 3-connected binary matroids by proving a chain theorem. (Received February 04, 2008)