

1037-05-318

Brian Beavers* (beaversbd@sfasu.edu), P.O. Box 13040 SFA Station, Nacogdoches, TX 75962-3040, and **James Oxley** (oxley@math.lsu.edu). *Constructive Characterizations of 3-Connected Matroids of Path Width Three.*

A matroid M is sequential or has path width 3 if M is 3-connected and its ground set has a sequential ordering, that is, an ordering (e_1, e_2, \dots, e_n) such that $(\{e_1, e_2, \dots, e_k\}, \{e_{k+1}, e_{k+2}, \dots, e_n\})$ is a 3-separation for all k in $\{3, 4, \dots, n - 3\}$. In this talk, we will discuss how every sequential matroid is easily constructible from a uniform matroid of rank or corank two by a sequence of moves each of which consists of a slight modification of segment-cosegment or cosegment-segment exchange. We will also discuss an attractive family of self-dual sequential 3-connected matroids such that any sequential matroid is a minor of some member of this family. (Received February 05, 2008)