

1086-05-1724 **Lara K. Pudwell*** (lara.pudwell@valpo.edu) and **Daniel A. Daly**. *Pattern Avoidance in Rook Monoids*. Preliminary report.

The rook monoid, R_n , on $\{0, 1, \dots, n\}$ is the set of all $n \times n$ 0-1 matrices that contain at most one 1 in every row and column. As such rook monoids are generalizations of permutations. In this talk we introduce the notion of pattern avoidance in rook monoids and give several enumerative results. (Received September 24, 2012)