1053-05-134   **J. Haglund*** (`jhaglund@math.upenn.edu`), 209 S. 33rd. St., math. Dept., Univ. of Penn., Philadelphia, PA 19104-6395. *Zeros of Pernaments and Rook Polynomials.*

We introduce a multi-variate polynomial defined via a pernament, and conjecture this polynomial is nonzero if all variables have positive imaginary part. We show how this conjecture implies the "Monotone Column Pernament" conjecture of Haglund, Ono, and Wagner, and prove various special cases of the conjecture using stability criterion of P. Branden. We discuss connnections between the conjecture and results of Szego and others. This is joint work with Mirko Visontai. (Received August 30, 2009)