

1077-05-1950      **J. Haglund\*** (jhaglund@math.upenn.edu) and **M. Visontai** (mirko@math.upenn.edu). *Stable multivariate Eulerian polynomials and generalized Stirling permutations.*

Stirling permutations were introduced by Gessel and Stanley in their study of Stirling numbers of the first and second kind. They also introduced a natural analog of the Eulerian polynomial for these permutations. In this talk we show there is a multivariate analog of their Eulerian polynomials which is stable in the sense of Borcea and Brändén. As a corollary we obtain a result of Bona, that these polynomials have only real zeros. Our methods utilize elements in the recent proof of the Monotone Column Permanent Conjecture by Brändén, Visontai, Wagner, and the speaker. (Received September 21, 2011)