1123-05-249 **Maria Monks Gillespie*** (mgillespie@math.ucdavis.edu), 1528 Walnut St., Apt. 4, Berkeley, CA 94709. *On q,t-symmetry in Macdonald polynomials and its relation to the $n!$ conjecture.* Preliminary report.

We discuss some recent results on q,t-symmetry in Macdonald polynomials and how this may help us understand the Garsia-Haiman bigraded S_n-modules. In particular, the Carlitz bijection is an alternative to the Foata bijection that proves the equidistribution of the inv and maj statistics on permutations. This bijection can be extended in a way that describes the combinatorics of a certain basis of the Garsia-Procesi modules, which essentially correspond to the $q = 0$ specialization of Macdonald polynomials, and we will present some progress towards extending this correspondence to the general setting. (Received August 28, 2016)