1145-05-1113 Rosa C Orellana*, Department of Mathematics, 6188 Kemeny Hall, Hanover, NH 03755, and Mike Zabrocki (zabrocki@mathstat.yorku.ca), Department of Mathematics and Statistics, York University, Toronto, Ontario M3J 1P3, Canada. Symmetric functions and the symmetric group.

The representation theory of the symmetric group and the general group are deeply connected to symmetric functions. And it is well known that Schur functions evaluate to characters of the general linear group.

In this talk I will discuss basis of the ring of the symmetric functions. This basis evaluates to the characters of the symmetric group just as the Schur functions evaluate to the characters of the general linear group. The structure coefficients when we multiply our basis elements are the stable Kronecker coefficients. In this talk I will discuss the combinatorics related to this new basis and how it relates to the partition algebra. (Received September 19, 2018)