1139-05-617 **Jia Huang**, **Brendon Rhoades*** (bprhoades@math.ucsd.edu) and **Travis Scrimshaw** (tcscrims@gmail.com). *Symmetric group and Hecke algebra actions on ordered set partitions.*

The *coinvariant algebra* R_n is a graded module for the symmetric group S_n whose properties are governed by the combinatorics of permutations. Given two positive integers $k \leq n$, Haglund, Rhoades, and Shimozono have generalized R_n to a ring $R_{n,k}$ whose properties are governed by the combinatorics of ordered set partitions. We study $R_{n,k}$, together with its 0-Hecke and full Hecke relatives, and describe a 'quantum analog' of the Garsia-Procesi machine for constructing graded modules. Joint with Jia Huang and Travis Scrimshaw. (Received February 20, 2018)