

1134-05-377

Brendan Pawlowski and **Brendon Rhoades*** (bprhoades@math.ucsd.edu). *Line configurations, ordered set partitions, and the Delta Conjecture.*

The *coinvariant ring* R_n is a graded S_n -module whose algebraic properties are deeply tied to permutations in S_n . Motivated by the *Delta Conjecture* of Macdonald theory, Haglund, Rhoades, and Shimozono recently defined a *generalized coinvariant ring* $R_{n,k}$ whose algebraic properties are governed by k -block ordered set partitions of size n . We define a variety $X_{n,k}$ whose cohomology is given by $R_{n,k}$; in the case $k = n$ this reduces to Borel's result that R_n is the cohomology of the flag manifold. (Received September 11, 2017)