1120-05-116   **James Haglund**, **Jeffrey Remmel**, **Brendon Rhoades*** (bprhoades@math.ucsd.edu) and **Andrew Timothy Wilson**. *Invariant ideals and the Delta conjecture.*

The ring of polynomials $\mathbb{Q}[x_1, \ldots, x_n]$ carries an action of the symmetric group S_n by subscript permutation. The ideal I generated by invariant polynomials with vanishing constant term, as well as the associated coinvariant ring $\mathbb{Q}[x_1, \ldots, x_n]/I$, enjoy many remarkable combinatorial properties. We will pose the problem of finding a generalization of the ideal I which extends these properties to the context of the recent *Delta conjecture* of Haglund, Remmel, and Wilson. (Received February 17, 2016)