ELLEN KIRKMAN, Wake Forest University

Invariant subrings of $\mathbb{C}_{-1}[x_1, \ldots, x_n]$ *under permutation actions*

Let $A = \mathbb{C}_{-1}[x_1, \ldots, x_n]$ be the skew polynomial algebra $x_j x_i = -x_i x_j$ for all $i \neq j$. The symmetric group S_n acts on A by permuting the indices. Let G be a subgroup of S_n. The subring of invariants A^G is an Artin-Schelter Gorenstein algebra. We compare properties of A^G to those of invariants of the commutative polynomial ring $\mathbb{C}[x_1 \ldots, x_n]^G$. (With James Kuzmanovich and James Zhang)