



ALGEBRA SEMINAR

Generic initial ideals of modular polynomial invariants

By

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Abstract: We study the generic initial ideals (gin) of certain ideals that arise in modular invariant theory. For all cases an explicit generating set is known we compute the generic initial ideal of the Hilbert ideal of a cyclic group of prime order for all monomial orders.

We also consider the Klein four group and note that its Hilbert ideals are Borel fixed with certain orderings of the variables. In all situations we consider, it is possible to select a monomial order such that the gin of the Hilbert ideal is equal to its initial ideal. Along the way we show that gin respects a permutation of the variables in the monomial order.

Date: October 30, 2019 Wednesday

Time: 10:40 – 11:50

Place: SA141 Mathematics Seminar Room