FRANK SOTTILE, Texas A&M University

Galois Groups for Systems of Equations

Camille Jordan observed that Galois groups arise in enumerative geometry, and we now also understand them as monodromy groups. A study of this question in the Schubert calculus has determined many such Galois groups, all known Schubert Galois groups are either the full symmetric group or are imprimitive. Recently, Esterov considered this question for systems of sparse polynomials and proved this dichotomy in that setting. While this classification identifies polynomial systems with imprimitive Galois groups, it does not identify the groups.

I will sketch the background, before explaining Esterov's classification and ongoing work identifying some of the imprimitive Galois groups for polynomial systems.