
NIC BANKS, University of Waterloo

Galois Theory and Computation of Intersective Polynomials

A polynomial with integer coefficients is called intersective if it has a root modulo n for all positive integers n . This talk will focus on intersective polynomials without integer roots, which represent a local-global failure. We will discuss classification efforts for such polynomials of low degree, utilizing a Galois-theoretic characterization of Berend and Bilu (1996). We conclude by discussing data collection and computational aspects of this problem, facilitated by Sage and GAP.