

Number Theory Seminar

Trace distributions and Galois groups of Frobenius polynomials

Santiago Arango-Piñeros (Emory University)

Abstract: I will discuss the multiplicative group generated by the roots of a monic polynomial with integer coefficients. In particular, I will focus on polynomials that arise as the characteristic polynomial of the Frobenius endomorphism of an abelian variety defined over a finite field. I will discuss some recent results and applications obtained in joint work with Bhamidipati and Sankar (<https://arxiv.org/abs/2306.02237>), and with Frengley and Vemulapalli (<https://sarangop1728.github.io/GaloisGroups>)

Friday, December 6 at 9:00 AM in 636 SEO