Graduate Number Theory Seminar

Remarks on the distribution of Frobenius for elliptic modules

Abel Castillo (UIC)

Abstract: In this talk we will state conjectures regarding the distribution of the trace of Frobenius for elliptic curves, including the the Lang-Trotter conjectures and the Koblitz conjecture, and point out how these are "higher-dimensional analogues" of familiar statements about primes in arithmetic progressions. We will then discuss heuristics that are used to make precise predictions about the constants appearing in the statements. As time permits, we will close by discussing analogues of these conjectures for Drinfeld modules in the global function field setting.

Monday, October 27 at 3:00 PM in SEO 712