

Speaker: Alina Cojocaru

Title: Frobenius traces for abelian varieties

Abstract: In the 1970s, S. Lang and H. Trotter proposed a conjectural asymptotic formula for the number of primes for which the Frobenius trace of an elliptic curve defined over the rational equals a given integer. We will discuss generalizations of this conjecture to higher dimensional abelian varieties and we will present recent results proven for abelian varieties that arise as products of non-isogenous non-CM elliptic curves. This is joint work with Tian Wang (University of Illinois at Chicago).