

1018-11-270

Alina Cojucaru* (cojucaru@Math.Princeton.EDU). *Frobenius fields for Drinfeld modules of rank 2.*

A classical conjecture of Lang and Trotter from 1976 predicts that, given an elliptic curve E over Q , without complex multiplication, and given an imaginary quadratic field K , the number of (ordinary) primes $p < x$ for which the Frobenius field of E at p is equal to K is asymptotically equal to $C(E, K)x^{1/2}/\log x$ for some constant $C(E, K)$ depending on E and K . In this talk I will discuss analogues of this conjecture in the context of Drinfeld modules. Joint work with Chantal David. (Received March 08, 2006)