Institut f. Analysis und Zahlentheorie

Zahlentheoretisches Kolloquium

Dienstag, 30. 4. 2019, 14:00 Uhr

Seminarraum Analysis-Zahlentheorie (NT02008), Kopernikusgasse 24/II

On abelian cubic polynomials

Dr. Stanley Yao Xiao

(University of Toronto)

Abstract: In this talk I will describe some recent work on counting monic cubic polynomials with respect to various heights. In particular, we prove that the number of irreducible, monic, Galois cubic polynomials $x^3 + a_2x^2 + a_1x + a_0$ with $\max\{|a_2|, |a_1|, |a_0|\} \leq X$ and whose I, J-invariants are co-prime is $O(X \log X)$.

K. Lapkova