Algebra and Number Theory Seminar

On computations of Shanks and Schmid

Robert Osburn
University College Dublin

Abstract: In 1966, Shanks and Schmid investigated the asymptotic behavior of the number of positive integers less than or equal to x which are represented by the quadratic form $X^2 + nY^2$, n greater than or equal to 1. Based on some numerical computations, they observed that the constant occurring in the main term appears to be the largest for $n = 2$. In this talk, we discuss a proof of the fact that this constant is actually unbounded as one runs through fundamental discriminants with a fixed number of distinct prime divisors. This is joint work with David Brink and Pieter Moree (MPIM).

Tuesday, October 30, 2012, 4:00 pm
Mathematics and Science Center: W306

Mathematics and Computer Science
Emory University