Equidistribution of CM point and ternary quadratic forms

DR. BEN KANE
DEPARTMENT OF MATHEMATICS
UNIVERSITY OF COLOGNE

Abstract:
In this talk, I will discuss two types of elliptic curves. The first type, called Complex Multiplication (CM) of discriminant $D$, have their solutions defined on a number field (think of the rationals), while the second type, supersingular elliptic curves, have their solutions defined on finite fields. There is a natural reduction map from CM elliptic curves to supersingular elliptic curves, and we will show in this talk that the reduction map is surjective (and moreover equally distributed among all supersingular elliptic curves) whenever $D$ is chosen sufficiently large. This is joint work with Dimitar Jetchev.

April 7, 12-1, Science 2, Room 308