



Seminar

K-Theory, Quadratic Forms and Number Theory

Title: Simultaneous representation of primes by quadratic forms

Speaker: Dr. David Brink (UCD)

Date: Wed 16th September 2009 at 3:00PM

Location: Mathematical Sciences Seminar Room

Abstract: It is well known that primes of the form $x^2 + ny^2$ are describable by congruence conditions if and only if $n \equiv 1 \pmod{4}$ and $n \not\equiv 2, 6 \pmod{7}$. Using class field theory, we derive five similar theorems and show that there are no other congruence conditions for n such that primes of the form $x^2 + ny^2$ are describable by congruence conditions.