



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  $n \not\equiv 0 \pmod{4}$ . Using class field theory, we derive five similar theorems and show that there are no other such theorems.