



Seminar

## K-Theory, Quadratic Forms and Number Theory

**Title:** Elementary equivalence of lattices of open sets definable in o-minimal expansions of fields

**Speaker:** Dr. Vincent Astier (UCD)

**Date:** Thu 10th November 2011 at 4:00PM

**Location:** Mathematical Sciences Seminar Room (Ag 1.01)

**Abstract:** The main result is that lattices of open definable subsets of o-minimal expansions of fields are always elementary equivalent, and the aim of the talk is mostly to explain what it means. I will present the notions of elementary equivalence (a model-theoretic approach to comparing structures) and o-minimality, then try to show what all of this has to do with lattices of open sets. Finally I will present the result and the tools used to obtain it.