



Seminar

## K-Theory, Quadratic Forms and Number Theory

**Title:** Integer symmetric matrices with small eigenvalues

**Speaker:** Professor Chris Smyth (Edinburgh)

**Date:** Wed 18th October 2006 at 4:00PM

**Location:** Mathematical Sciences Seminar Room

**Abstract:** In joint work with James McKee, we describe all integer symmetric matrices whose eigenvalues have modulus at most 2. It turns out that they can be essentially described by certain kinds of graphs, which we call charged signed graphs. What is the significance of the bound 2? I'll explain this in the talk. If time permits I'll also describe a potential application for these matrices.

<http://mathsci.ucd.ie/sms/research/seminars/KTQFseminar.html>