



Seminar

## K-Theory, Quadratic Forms and Number Theory

**Title:** Rankin-Cohen brackets and van der Pol-type identities for Ramanujan's tau function

**Speaker:** Dr. Brundaban Sahu (UCD)

**Date:** Wed 4th February 2009 at 4:00PM

**Location:** Mathematical Sciences Seminar Room

**Abstract:** We use Rankin-Cohen brackets for modular forms and quasimodular forms to give a different proof of results obtained by D. Lanphier and D. Niebur on van der Pol-type identities for Ramanujan's tau function. As a consequence, we obtain convolution sums and congruence relations involving divisor functions.