



## Algebra and Number Theory Seminar

**Title:** Rank Problems for Subspaces of Symmetric or Hermitian Matrices Over Finite Fields

**Speaker:** Rod Gow (UCD)

**Date:** Mon 18th October 2010 at 4:00PM

**Location:** Mathematical Sciences Seminar Room

**Abstract:** Using a counting method, we obtain bounds for the dimensions of subspaces of symmetric or hermitian matrices that satisfy certain restrictions on the ranks of their elements. In some cases, the bounds are optimal. We assume in most of the work that we are working over a finite field.