



## Algebra and Number Theory Seminar

**Title:** Constant rank subspaces of matrices I

**Speaker:** Rod Gow (UCD)

**Date:** Mon 15th September 2008 at 4:00PM

**Location:** Mathematical Sciences Seminar Room

**Abstract:** This will be a survey of questions relating to subspaces of  $n \times n$  matrices all of whose non-zero elements have the same rank. We will describe known results bounding the dimensions of such subspaces and give some constructions using field-theoretic techniques. We will also discuss the group of equivalences of certain of these subspaces.