



## Algebra and Number Theory Seminar

**Title:** A family of polynomials related to the cross-correlation of Golomb Costas arrays

**Speaker:** Konstantinos Drakakis (University College, Dublin)

**Date:** Mon 5th October 2009 at 4:00PM

**Location:** Mathematical Sciences Seminar Room

**Abstract:** I will show how the cross-correlation of Golomb Costas arrays leads naturally to the algebraic problem of the determination of the number of roots of a family of polynomials over a finite field, and I will mention several partial results and several further conjectures. I will then focus on a specific polynomial of this family, and study its roots over the field of complex numbers, where I will again mention several partial results and several further conjectures. This is a joint work with Rod Gow and Danny Lynch.