Algebra and Number Theory Seminar

Polona Oblak (University of Ljubljana, Slovenia)

will speak on

On Commuting Graphs

Mon 20th September 2010 at 4:00PM

Location: Mathematical Sciences Seminar Room

The commuting graph G(S) of a semigroup (or a semiring) S is the graph, whose vertex set is the set of all noncentral elements of S and x-y is an edge in G(S) if xy=yx and x is not equal to y. The commuting graphs are an illustrative way of describing centralizers of elements in certain algebraic structures. In the talk, we introduce commuting graphs and give some recent results on diameters of commuting graphs of different algebraic structures. The main part of the talk will be concentrating on commuting graphs of matrices over rings and semirings.

This talk is part of the **Algebra and Number Theory** series. For more, see
https://maths.ucd.ie/seminars