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K-Theory, Quadratic Forms and Number Theory Seminar

Dr. Zsolt Balogh (Institute of Mathematics and Informatics, Hungary)

will speak on

Involutions and symmetric elements in group algebras

Wed 27th January 2010 at 4:00PM

Location: Mathematical Sciences Seminar Room

Let A be an algebra with an involution *. An element x in A is called symmetric (skew symmetric) with respect to *, if $x^* = x(x^* = -x)$. Denote A^+ and A^- these to f symmetric and skew symmetric elements of A, respective to the set of the set

Let FG be a group algebra of a group G over a field F of characteristic p, and let * be an involution of FG. We would like to give a survey concerning the theory of polynomial identities and group identities in the set of symmetric (skew symmetric) elements of FG. Under the canonical involution of FG we give some identities in $FG^+(FG^-)$, which can be transferred to the whole algebra. Furthermore, for some Lagebra is the second secon identities we consider not only the canonical involutions.

This talk is part of the K-Theory, Quadratic Forms and Number Theory series. For more, see https://maths.ucd.ie/seminars