Queen's Algebraic Geometry
— Seminar —

NONCOMMUTATIVE LINEAR ALGEBRA
AND PRIMITIVE IDEALS

VICTOR PROTSAK
SUNY Oswego

Abstract

Many classical results about matrices involving the determinant, characteristic and minimal polynomials admit natural noncommutative generalizations. For example, the Capelli identity expresses a relation between the characteristic polynomials of AB and $AtBt$ for certain matrices of differential operators. This is what I mean by "noncommutative linear algebra". This formalism throws new light on the known subtle differences between primitive ideals in the universal enveloping algebras and the coadjoint orbits.

Monday 17 January 2011
16:30 – 17:30
319 Jeffery Hall