

ALGEBRA SEMINAR

Some new algebras with quartic growth

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ABSTRACT: We describe a family of algebras with surprising properties. They are graded noetherian domains with global dimension 4 and the same Hilbert series as polynomials in 4 variables. However, they have transcendence degree 3 (in the appropriate sense) and can be regarded as noncommutative coordinate rings on a rational surface. Such algebras were conjectured not to exist by Rogalski and Stafford. This is joint work with Rogalski.

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1:40 – 2:30 PM
ROOM 617, WACHMAN HALL
DEPARTMENT OF MATHEMATICS