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SEMINARIO DE GEOMETRÍA ALGEBRAICA

Jueves 26 de Marzo de 2008, **13:00**, Seminario 238

Rosa M. Miró - Roig

Universidad de Barcelona

Impartirá la conferencia

Tilting sheaves on toric varieties

Abstract.
(Joint work with L. Costa.) A. King stated the following conjecture: Any smooth complete toric variety has a tilting bundle whose summands are line bundles or, equivalently, the derived category of a smooth complete toric variety has an orthogonal basis made up of line bundles. The goal of this paper is to prove King's conjecture for the following type of smooth complete toric varieties: (1) Any d-dimensional smooth toric variety with splitting fan; (2) Any d-dimensional smooth toric variety with (almost)maximal Picard number or (almost)minimal Picard number; and (3) The blow up of any smooth toric surface at T-invariants points.