Queen's Algebraic Geometry — Seminar —

RATIONAL NORMAL CURVES IN \mathbb{P}^n

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Abstract

During the talk we will investigate some interesting, but unusual, questions about rational normal curves (rnc). As an example, we can ask: are there rnc's in \mathbb{P}^3 2-secant to 6 generic lines, or, are there rnc's passing through four generic points and 2-secant to two generic lines in \mathbb{P}^3 ? The interest in this kind of questios is old, and it has been recently renewed by unexpected connections. Indeed, these questions about rnc's are related to the defectivity of Segre Veronese variety and with the postulation of schemes supported on linear spaces. The techniques we use vary from classical algebraic geometry to commutative algebra. This talk is based on joint work with M.V. Catalisano.

Monday, September 22, 2008 4:30pm - 5:30pm 319 Jeffery Hall