Queen's Algebraic Geometry — Seminar —

GOTZMANN COEFFICIENTS OF HILBERT FUNCTIONS

TONY GERAMITA Queen's University

Abstract

It is well known that the Hilbert function and the Hilbert polynomial of an embedded algebraic variety not only carry "algebraic" information about the variety, but also can be used to calculate "geometric" properties of the variety, e.g. its dimension and its degree.

The search for other geometric properties of the variety that are encoded in the Hilbert function and polynomial has a long history and today I'd like to describe some recent work along these lines which I have done in collaboration with J. Ahn and Y.S. Shin.

Monday, November 24, 2008 4:30pm – 5:30pm 319 Jeffery Hall