Queen's Algebraic Geometry
— Seminar —

SUBORDINATE LOCI ON SYMMETRIC PRODUCTS AND SYZYGIES OF POINTS

YUSUF MUSTOPA
University of Michigan

Abstract

The d-th symmetric product C_d of a smooth projective curve C is a smooth projective variety which encodes the "degree-d aspect" of the geometry of C. The subordinate loci on C_d associated to linear series on C encode the degree-d aspect of maps from C to projective space. In this talk, I will discuss how these loci govern the cone of effective divisors of C_d, how some natural divisors on C_d may be characterized as subordinate loci associated to higher-rank vector bundles, and also a conjectural description of the effective cone of C_d when C is a general curve of genus g and d is at least $(g/2) + 1$.

Monday, November 9, 2009
3:00pm – 4:00pm
319 Jeffery Hall