

Queen's Algebraic Geometry — Seminar —

HILBERT FUNCTIONS OF ARTINIAN RINGS EQUIPPED WITH A SYMMETRIC GROUP ACTION

DAVID WEHLAU
Royal Military College

Abstract

We consider graded artinian Gorenstein quotients of the polynomial ring which are also representations of the symmetric group and whose socle is invariant. We will determine their graded characters and Hilbert functions by relating these algebras to subrepresentations of the regular representation of the symmetric group. These graded characters turn out to be closely related to Kostka–Foulkes polynomials.

Monday 27 October 2014
16:30–17:30
319 Jeffery Hall