Queen's Algebraic Geometry — Seminar —

NONNEGATIVITY CERTIFICATES FOR REAL PROJECTIVE CURVES

GREGORY G. SMITH Queen's University

Abstract

How can one use sums of squares to characterize nonnegative polynomials? In this talk, we will review some general methods for certifying that a polynomial is nonnegative on a real projective subvariety. We will then present new optimal degree bounds for certificates on real projective curves. This talk is based on joint work with Grigoriy Blekherman and Mauricio Velasco.

Monday, 28 September 2015 16:30–17:30 319 Jeffery Hall