

Stanford Algebraic Geometry — Seminar —

THE AMPLE AND EFFECTIVE CONES OF KONTSEVICH MODULI SPACES

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Abstract

In the last decade the Kontsevich moduli spaces of stable maps have emerged as an invaluable tool for answering questions of algebraic geometry, combinatorics and mathematical physics. In this talk I will discuss joint work with Joe Harris and Jason Starr on understanding the geometry of divisors on Kontsevich moduli spaces. The cones of ample and effective divisors on a variety fundamentally influence the birational geometry of the variety. In our work we gave a complete description of the ample cone based on a standard conjecture for curves. Recently we also obtained a complete description of the effective cone in the stable range. I will explain these results and discuss possible applications to corresponding questions for the moduli spaces of curves and questions of rational connectivity.

Friday, January 20
3:15 p.m.
Room 383-N

<http://math.stanford.edu/~vakil/s0506/>