Harvard-MIT Algebraic Geometry Seminar

Effective divisors and curves on moduli spaces of curves

Jenia Tevelev

University of Massachusetts

In a joint work with Ana-Maria Castravet, we discovered a sort of a "mirror correspondence": extremal effective (but not boundary) divisors on the moduli space of stable rational curves with n punctures correspond to maximal degenerations of genus $g = n - 3$ curves to the union of lines. For example, the non-boundary extremal divisor for $n = 6$ (the Keel-Vermeire divisor) corresponds to the degeneration of a genus 3 curve (a plane quartic) to the union of four lines. Related results about extremal effective curves will also be discussed.

Tuesday December 2nd
3:00 p.m.
Harvard (SC 507)