

Harvard-MIT Algebraic Geometry Seminar

Linear sections of the Severi variety and moduli of curves

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We discuss the geometry of the Severi variety of plane curves of degree d and genus g , and a partial resolution of the associated moduli map to \bar{M}_g . One-dimensional linear sections of the Severi variety induce curves in \bar{M}_g , which are free once d is large enough. We use the degeneration techniques of Caporaso and Harris to study the geometry and numerical invariants of these curves.

Tuesday October 30th
3:00 p.m.
MIT (2-142)