

Algebraic Geometry Seminar

Cohomology of heavy/light moduli spaces of curves

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Abstract: Given integers g , m , and n , the heavy/light moduli space $\overline{M}_{g, m|n}$ is a compactification of the moduli space of smooth $(m+n)$ -marked curves of genus g . These spaces are particular examples of Hassett's moduli spaces of weighted stable curves. Their rational cohomology gives a rich family of representations of products of symmetric groups. I'll discuss recent work on the structure of this family of representations, and how they relate to the S_n -representations determined by the cohomology of Deligne-Mumford compactifications. This talk is based on joint work with Stefano Serpente and Claudia Yun.

Monday, April 10 at 12:00 PM in 636 SEO