

Harvard-M.I.T. Algebraic Geometry Seminar

ON THE COHOMOLOGY OF MODULI SPACES OF POINTED CURVES OF LOW GENUS

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The computation of the cohomology of moduli spaces of n -pointed curves may essentially be reduced, by using the action of the symmetric group, to that of the cohomology of local systems on M_g for the symplectic group. The answer for genus 1 has been known for a long time. Van der Geer and I have obtained explicit formulas for genus 2, which are partly conjectural. Bergström has obtained results for genus 3. Consani and I have obtained a new construction of the cohomology in genus 1 related to cusp forms. I will discuss these results.

Tuesday, March 1st, 2005

3:00 p.m.

MIT Room 4-163

<http://www-math.mit.edu/ags/>