

Stanford Algebraic Geometry Seminar / Special Seminar

RELATIONS IN THE COHOMOLOGY OF $M_{g,n}$

ELENY IONEL

Wisconsin

Abstract

Consider the moduli space $M_{g,n}$ of complex structures on a genus g Riemann surface with n punctures. Relations in the cohomology of its Deligne-Mumford compactification induce in particular universal relations among the Gromov-Witten invariants of any symplectic manifold. But one can also obtain relations in the cohomology of $M_{g,n}$ by studying the structure of Gromov-Witten invariants for simple spaces like S^2 . In this talk we will describe two different sets of relations obtained this way. The first set generalizes relations found by Looijenga and Getzler, while the second set proves a conjecture made by Faber.

Friday, February 28

3:30 p.m.

Room 383-N

<http://math.stanford.edu/~vakil/seminar0203/>