Stanford Algebraic Geometry
— Seminar —

ORBIFOLD GROMOV-WITTEN INVARIANTS AND RELATIVE GROMOV-WITTEN INVARIANTS

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Abstract

Relative Gromov–Witten invariants are deformation invariant counts of curves in a smooth variety X (over $\mathbf{C}$) with contact conditions along a divisor D. These are computed on the moduli space of relative stable maps defined by J. Li. Abramovich and Fantechi have given a new description of the obstruction theory (the gadget that guarantees deformation invariance) for the moduli space of relative stable maps. I will describe a relationship in the genus zero case between this obstruction theory and the obstruction theory for the moduli space of orbifold stable maps to a certain stack associated to X and D. This relationship allows genus zero relative Gromov–Witten invariants to be calculated using orbifold methods. This is joint work with Dan Abramovich and Charles Cadman.

Friday, September 26
3:00 p.m. **(Note unusual time due to welcome party!)**
Room 383-N