



SCUOLA
NORMALE
SUPERIORE

SEMINARIO DI MATEMATICA

mercoledì 08 giugno 2011
ore 15.00

Scuola Normale Superiore
Pisa
(Sala degli Stemmi)

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Terrà un seminario dal titolo:

“Reduced obstruction theories via derived algebraic geometry”

Abstract

Let S be an algebraic K3-surface, $g \geq 0$, and $b \neq 0$ in $H_2(S, \mathbb{Z})$ a curve class. After recalling the necessary background on derived algebraic geometry I will construct a derived stack RM whose truncation is the usual stack M of stable maps from curves of genus g to S hitting the class b , and such that the inclusion of M into RM induces on M a perfect obstruction theory whose tangent and obstruction spaces coincide with the corresponding reduced spaces of Okounkov–Maulik–Pandharipande–Thomas. This approach uses derived algebraic geometry and yields not only a full rigorous proof of the existence of a global reduced obstruction theory, not relying on any result on semiregularity maps, but also a new global geometric interpretation. This is joint work with T. Schürg (Mainz) and B. Toën (CNRS, Montpellier).

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze