



Speaker: Feng Wang
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Tuesday, April 3, 2012
1:00 PM
205 DeBartolo Hall

Title: Symmetric obstruction theory and microlocal geometry

Abstract:

Given a moduli functor which is representable by a Deligne-Mumford stack, if we suppose the stack has the so called perfect obstruction theory, we can define the virtual cycle the integration over which will give us some invariants. The Gromov-Witten invariant and Donaldson-Thomas invariant are both defined this way. I want to talk about the relation between this virtual cycle and the Euler characteristics of the stack in the case of symmetric perfect obstruction theory. The "Euler characteristics" is defined by K. Behrend. Apart from the fundamental properties mentioned by N. Budur in the introduction, I will give some concrete examples to calculate the Euler characteristics.