Mathematics, Statistics, and Computer Science   **@ UIC**

Algebraic Geometry Seminar

Double ramification cycles for target varieties

Rahul Pandharipande (ETH)

Abstract: A basic question in the theory of algebraic curves is whether a divisor represents the zeros and poles of a rational function. An explicit solution in terms of periods was given by the work of Abel and Jacobi in the 19th century. In the past few years, a different approach to the question has been pursued: what is the class in the moduli of pointed curves of the locus of such divisors? The answer in Gromov-Witten theory is given by Pixton's formula for the double ramification cycle. I will discuss recent work with F. Janda, A. Pixton, and D. Zvonkine which considers double ramification cycles for target varieties X (where Pixton's original question is viewed as the X=point case). I will also discuss the associated relations studied by Y. Bae.

Friday, April 19 at 2:00 PM in 427 SEO