

Front Range Algebra, Geometry and Number Theory Seminar

Local structure of the compactified Jacobian

Jesse Kass

University of Michigan

The Jacobian variety of a non-singular curve is a basic tool in algebraic geometry, and a fundamental question is how to extend this construction to singular curves? Starting with work of Igusa in the 1950's, a great deal of effort has gone into answering this question. Today we have a detailed understanding of how to assign a degenerate Jacobian to a singular curve, but our understanding of the geometry of the resulting objects is less extensive. In my talk, I discuss work on the local geometry of the Caporaso-Pandharipande degenerate Jacobian. This work is joint with Sebastian Casalaina-Martin and Filippo Viviani.

Thursday February 17th 2011

3:00-5:00 p.m.

University of Colorado

MATH 350