

1086-14-974

Sebastian Casalaina-Martin*, University of Colorado Boulder, Department of Mathematics, Boulder, CO 80309, and **Jesse Kass** and **Filippo Viviani**. *The local structure of compactified Jacobians*.

The Jacobian of a nonsingular curve is an abelian variety parameterizing degree zero line bundles on the curve. The close connection between the geometry of the curve, and the geometry of the Jacobian has been studied in great depth since the 19th century. For singular curves, the connection between a curve and its Jacobian is still not fully understood. Caporaso, Oda–Seshadri, Pandharipande, and Simpson have constructed spaces called compactified Jacobians, which play the role of the Jacobian in the case of stable curves. I will discuss joint work with J. Kass and F. Viviani, where we describe the singularities of these compactified Jacobians. Time permitting, applications to the geometry of stable curves and moduli spaces will also be discussed. (Received September 17, 2012)