BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

GEOMETRY, TOPOLOGY, AND PHYSICS SEMINAR

Singular elliptic genus of complex surfaces

Robert Waelder UCLA

Friday, December 7, 2007, 4:00 p.m. Room 6635 South Hall

Abstract: The extension of smooth invariants such as Chern numbers and Hodge numbers to singular varieties has interesting applications in mirror symmetry and algebraic geometry. Two such invariants of particular interest are the stringy E-function of Batyrev, and the singular elliptic genus of Borisov and Libgober. I will discuss these invariants, their limitations, and a promising generalization for the case of normal algebraic surfaces.