Geometry, Topology, and Physics Seminar

Calabi–Yau Singularities

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Friday, February 15, 2008, 4:00 p.m.
Room 6635 South Hall

Abstract: Calabi–Yau threefolds are compact Riemannian manifolds with holonomy SU(3), and as such, are always projective algebraic varieties. As algebraic varieties, there is a natural generalization to singular Calabi–Yau threefolds (although the existence of generalized metrics on these singular spaces is not known). Moreover, in the application of Calabi–Yau threefolds to the study of string compactification, singular Calabi–Yau threefolds play an important role. We will review what is known about the "Calabi–Yau singularities" on such spaces, with an eye on recent developments and applications.

Information about future meetings of this seminar can be found at
http://www.math.ucsb.edu/~malmendier/GTPseminar/