

1072-53-214

Albert J Todd* (ajtodd83@gmail.com). *Moduli Spaces of Asymptotically Cylindrical Special Lagrangian Submanifolds.*

The goal of this talk is to show that the space of local deformations of an asymptotically cylindrical special Lagrangian submanifold is a smooth finite-dimensional manifold for almost all decay rates of the submanifold. After a bit of background on this problem, I will discuss Calabi-Yau and special Lagrangian geometry as well as give an introduction to the analysis on asymptotically cylindrical manifolds required to solve this problem; finally, I will explicitly calculate the admissible decay rates and outline the argument to show the desired results on the moduli space. Time permitting, I will briefly describe applications of this result. (Received June 28, 2011)