

Colloquium

University of Notre Dame
Department of Mathematics

Speaker: Yuguang Zhang

University of Bath - United Kingdom

Will give a lecture entitled

Adiabatic limits of anti-self-dual connections on collapsed K3 surfaces

Date: Wednesday, January 16, 2019

Time: 4:00 PM

Location: 117 Hayes-Healy Hall

Departmental Tea: Tea in Room 257 (lounge in Hurley Hall) at 3:30 p.m.

Abstract:

In this talk, we study the adiabatic limits of anti-self-dual connections along the collapsing of Ricci-flat Kahler-Einstein metrics on elliptically fibered K3 surfaces. We show that the restrictions of the limit connection on fibers are flat, and induce a holomorphic curve on the K3 surface. An application is the proof of a version of the Fukaya conjecture in the context of SYZ mirror symmetry.

