

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

GEOMETRY SEMINAR

SYZ for Abelian Varieties and Witten Morse Theory

Mr. Ziming Ma

The Chinese University of Hong Kong

Date: February 18, 2014 (Tuesday)

Time: 4:30 – 5:30pm

Venue: Room 210, Run Run Shaw Bldg., HKU

Abstract

We show A -model holomorphic disks counting appearing as leading order terms in the asymptotic expansions of B -model differential geometric operations acting on kernel of $\Delta_{\bar{\partial}}$, for mirror families of Abelian varieties degenerating to their large structure limits. The proof involves taking fiber-wise Fourier-type transform and applying Witten-Morse theory. It is a joint work with Kaileung Chan and Conan Leung.

All are welcome