VAFA-WITTEN INVARIANTS ON ELLIPTIC FIBRATIONS

Speaker: Sanghyeon Lee
Shanghai Center for Mathematical Sciences

Time：Wed., May 22nd, 10:00-10:30
Venue: Room 110, Shanghai Center for Mathematical Sciences

Abstract:

Recently D. Nesterov studied how to relate moduli space of sheaves over a threefold C x X with a space of quasimap from the curve C to the moduli space of sheaves over X.

In this talk I will explain how to modify this correspondence to study Vafa-Witten invariants over surfafces S which has elliptic fibration structure over C. I will introduce notion of quasisections from C to the relative moduli space of Higgs sheaves over S/C, and epsilon wall-crossing formula for invariants from the moduli space of quasisections.

This is based on joint work with Yaoxiong Wen.