上海数学中心
SHANGHAI CENTER FOR
MATHEMATICAL SCIENCES

SIMIS

ENUMERATIVE GEOMETRY SEMINAR

Speaker: Zhengyu Zong

Tsinghua University

Time: Thur. Dec. 4th, 14:00 - 16:00

Venue: SCMS room 102

Remodeling conjecture with descendants

Abstract: Based on the work of Eynard-Orantin and Marino, the Remodeling Conjecture was proposed in the papers of Bouchard-Klemm-Marino-Pasquetti in 2007 and 2008. The Remodeling Conjecture can be viewed as an all genus open-closed mirror symmetry for toric Calabi-Yau 3-orbifolds.

In this talk, I will describe the Remodeling Conjecture with descendants, which is an all genus mirror symmetry with integral structures for descendant Gromov-Witten invariants of toric Calabi-Yau 3- orbifolds. The B-model is given by the oscillatory integrals of the Chekhov-Eynard-Orantin invariants along relative 1-cycles on the equivariant mirror curve. In the non-equivariant setting, we prove the Hosono Conjecture for toric Calabi-Yau 3-orbifolds, which identifies the quantum cohomology central charges of compactly supported coherent sheaves to period integrals of a holomorphic 3-form along integral 3-cycles on the Hori-Vafa B-model. This talk is based on joint work with Bohan Fang, Chiu-Chu Melissa Liu, and Song Yu.