



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

PhD Student Seminar

Polynomial Structure of Fermat FJRW Theory

By

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Abstract

According to mirror symmetry, Gromov–Witten invariants of a Calabi–Yau threefold can be computed by the Picard–Fuchs equation of periods of its mirror Calabi–Yau threefold. In the higher genus case, the B-model becomes BCOV theory, and it is mathematically proved higher genus Gromov-Witten invariants indeed have the structures predicted by B-model. One of the methods is to use N-Mixed Spin p -field theory. It's the story near "large complex structure point". Near the "Gepner point", the corresponding A-model is FJRW theory. This talk aims to give the polynomial structure (predicted by B-model) of Fermat quintic FJRW theory, using N-Mixed Spin p -field theory.

Date : 3 May 2023 (Wednesday)

Time : 10:30 am

Venue : Room 5510 (Lifts 25/26)

All are Welcome!