

GW theory, FJRW theory, and MSP fields

Speaker: Chiu-Chu Melissa Liu (Columbia University, USA)

Abstract:

Gromov-Witten (GW) invariants of the quintic Calabi-Yau 3-fold are virtual counts of parametrized algebraic curves in the quintic threefold. Fan-Jarvis-Ruan-Witten (FJRW) invariants are virtual counts of solutions to the Witten equation associated to the Fermat quintic polynomial. In this talk, I will describe the theory of Mixed-Spin-P (MSP) fields interpolating GW theory of the quintic 3-fold and FJRW theory of the Fermat quintic polynomial, based on joint work with Huai-Liang Chang, Jun Li, and Wei-Ping Li.