

ENUMERATIVE GEOMETRY SEMINAR

Speaker: Satoshi Nawata

Fudan University

Time: Wed. Nov. 26th, 14:00 - 16:00

Venue: SIMIS room 1710

DT/PT Correspondence from Combinatorics

Abstract: In this talk, I will present explicit methods for computing the generating functions of equivariant Donaldson–Thomas (DT) and Pandharipande–Thomas (PT) invariants on C^3 . By using the combinatorial structure of 3d Young diagrams, I will explain quiver descriptions of the corresponding moduli spaces, and how their generating functions can be computed via Jeffrey–Kirwan residues using localization on these moduli spaces. By varying the contour cycles, it is expected to naturally recover the DT/PT correspondence. While the approach provides strong computational evidence, it currently lacks mathematical rigor, and it is desirable to develop a precise mathematical formulation and proof. This talk is a continuation of my previous presentation.

