THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

ALGEBRA AND GEOMETRY SEMINAR

Intersection numbers and symmetric polynomials

by

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Abstract

Generating functions of intersection numbers on moduli spaces of curves provide geometric solutions to integrable systems. Notable examples are the Kontsevich-Witten tau function and Brezin-Gross-Witten tau function. In this talk I will first describe how to use Schur's Q-polynomials to obtain simple formulas for these functions. I will then discuss possible extensions for more general geometric models using Hall-Littlewood polynomials. This talk is based on joint works with Chenglang Yang.

Date : 27 February 2024 (Tuesday)

Time : 4:30pm – 6:00pm

Venue : Room 4503 (Lifts 25/26)

All are Welcome!