The Hong Kong University of Science and Technology

Department of Mathematics

<u>Seminar on Pure Mathematics</u>

Higher-genus wall-crossing in the Landau-Ginzburg theory

By

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<u>Abstract</u>

Given a Fermat quasi-homogeneous polynomial W of degree r, the Fan-Jarvis-Ruan-Witten invariants are defined via the intersection theory on the moduli of stable r-spin curves. It is the so-called Landau--Ginzburg A-model of W in mirror symmetry, which is conjecturally related to the curve-counting theory on the hypersurface defined by W.

Varying the stability condition in the construction results in new moduli spaces and the weighted FJRW invariants, related to the original FJRW invariants via a wall-crossing formula. In this talk we study the change of the moduli space and prove the wall-crossing formula in all genera, for narrow insertions. This is analogous to the higher-genus quasi-map wall-crossing formula proved by Ciocan-Fontanine and Kim.

Date: **Tuesday, 28 August 2018**

Time: **10:30a.m. - 11:30a.m.**

Venue: **Room 4502, Academic Building (Lifts 25, 26), HKUST**

All are welcome!