The Hong Kong University of Science and Technology

Department of Mathematics

<u>Seminar on Geometry</u>

The tautological ring of *M_g* revisited

by

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<u>Abstract</u>

I will review the tautological ring of *M_g* from a representation-theoretic/motivic point of view. This allows us to completely determine the tautological rings of all fibered powers of the universal curve over *M_g* for *g* small. We also obtained some structural results along the way, and located a possible failure of the Gorenstein conjecture for the fibered powers of the universal curve. Joint work with Dan Petersen and Mehdi Tavakol.

Date : **Friday, 1 March 2019**

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

Venue: **Room 5562, Academic Building (near Lifts 27-28), HKUST**

All are welcome!