



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PURE MATHEMATICS

**Pushing TASEP and dual stable
Grothendieck polynomials**

by

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Abstract

In 2008, Dieker and Warren studied a version of TASEP with finitely many particles arranged on a line, involving two types of particle interactions called pushing and blocking. In fact, the corresponding transition kernels can be naturally related to noncommutative Schur operators. As a consequence, the transition probabilities between two states can be expressed in terms of K-theoretic symmetric polynomials. This talk is based on joint work with Kohei Motegi (Tokyo University of Marine Science and Technology) and Travis Scrimshaw (Hokkaido University).

Date : 17 June 2026 (Wednesday)

Time : 3:00p.m.-4:00p.m.

Venue : Room 4475 (near Lift 25/26)

All are Welcome!