



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

## **SEMINAR ON PURE MATHEMATICS**

# **Determinoids and their left multiplicativity**

by

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### Abstract

During linear algebra class, we learnt various facts about square matrices, and most importantly, used the determinant of a given matrix to solve different kinds of problems. However, in real life situation, most of the problems involving matrices cannot be expressed by square matrices. Although there are some methods to reduce the problem by turning those non-square matrices into square matrices, is there a more direct way to study these kinds of non-square matrices? In this talk, I will explain the determinant-like functional for non-square matrices, called determinoid, and study its left multiplicativity.

**Date : 14 July 2022 (Thursday)**

**Time : 3:00pm – 4:00pm**

**Venue : Room 3494 (near Lifts 25/26)**

**Zoom Meeting : <https://hkust.zoom.us/j/94216588781> (Passcode: 140722)**

*All are Welcome!*