



香港科技大學
THE HONG KONG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY



DEPARTMENT OF
MATHEMATICS
SCHOOL OF SCIENCE, HKUST

THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

Summer Research Program 2022

PG STUDENT SEMINAR

Analysis of Epitaxial Growth with Elastic Effects

By

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Abstract

In heteroepitaxial growth, elasticity-driven surface morphology instabilities have been widely employed to generate self-assembled nanostructures on the film surfaces, which have various applications in semiconductor industry. In this talk, I will review the traditional epitaxial growth models and some results. Then I will show a continuum model that incorporates the discrete features of the stepped surfaces and present our latest research on existence, uniqueness, and energy scaling of 2+1-dimensional continuum model for stepped epitaxial surfaces with elastic effects.

Date : 25 July 2022 (Monday)

Time : 3:00pm

Zoom Meeting : <https://hkust.zoom.us/j/97204413613> (Passcode: HKUST)

All are Welcome!