



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

PHD STUDENT SEMINAR

Curvilinear Tilings and Hurwitz Problem

By

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Abstract

The classical Hurwitz realisation problem was largely solved by Edmond, Kulkarni, Stong in 1980's. Some of their work was done by relating to tilings of surfaces. In this talk, we revisit the problem from the fresh angle of edge-to-edge tilings of surfaces by congruent curvilinear polygons. We first show the necessary and sufficient condition for a branched data to come from a tiling. Then we show the existence of minimal tilings of fixed branch data, which shows the classification problem can be hard to solve.

Date : 6 May 2026 (Wednesday)

Time : 10:30am

Venue : Room 3598 (near Lifts 27/28)

All are Welcome!