



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

Summer Research Program 2022

PG STUDENT SEMINAR

Tilings of the Sphere by Congruent Polygons

By

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Abstract

Tilings are ubiquitous in nature as well as in human civilisations. The knowledge of tilings not only enriches different facets of our cultures but also advances science and technology. Along with their aesthetic appeal, tilings as geometric objects have deep connection to other branches of Mathematics.

We talk about tilings by congruent polygons, especially edge-to-edge tilings of the sphere by congruent polygons. It is known that in these tilings, the polygons are triangle, quadrilateral and pentagon. The classification of the tilings was first started by Duncan Sommerville in 1924. In the recent two decades, significant progress has been made by various mathematicians to complete the studies. In this talk, we will highlight some exciting recent results. It is a joint work with Dr. Ho Man Cheung and Prof. Min Yan.

Date : 11 July 2022 (Monday)

Time : 3:00pm

Zoom Meeting : <https://hkust.zoom.us/j/96166595513> (Passcode: 032282)

All are Welcome!