



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON APPLIED MATHEMATICS

Large-scale index theory in quantum matter

By

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Abstract

A quantum Hall system is governed by a magnetic Schrodinger operator on the 2D sample manifold. Remarkably, its conductance is always rounded off to an integer, and this spectral property withstands a huge range of geometric perturbations. This is an example of large-scale quantization, whose underlying mechanism comes from the growing mathematical field of large-scale index theory.

Date : 4 July 2023 (Tuesday)

Time : 4:00pm – 5:00pm

Venue : Room 4475 (Lifts 25/26)

All are Welcome!