

CTCP SEMINAR

Modulated SPT in 1D:
Classification, Crystalline
Equivalent Principle and LSM
constraints

Dr. Shang-Qiang NING

The Hong Kong University of Science and Technology

Tuesday, August 25, 2026, 4:00pm

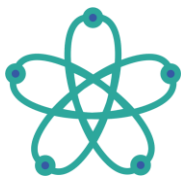
**Room 522, 5/F, Chong Yuet Ming Physics Building,
The University of Hong Kong**

Abstract:

Topological phases of matter can be protected not only by on-site symmetries, but also by crystalline symmetries. In this talk, I will present the classification of 1D symmetry-protected topological (SPT) phases protected by both on-site and crystalline symmetries—referred to as modulated SPT phases—and show how it aligns with the crystalline equivalence principle through the MPS formalism. Furthermore, I will discuss their applications to Lieb–Schultz–Mattis (LSM) constraints and non-invertible symmetries.

ANYONE INTERESTED IS WELCOME TO ATTEND!

HK Institute of Quantum Science & Technology,
Room525, Chong Yuet Ming Physics Building, The University of Hong Kong
Phone: 3917 1108



HK Institute of
Quantum Science & Technology
香港量子研究院



Department of Physics
THE UNIVERSITY OF HONG KONG