



THE CHINESE UNIVERSITY OF HONG KONG
Department of Physics
COLLOQUIUM

Symmetry Indicators for Topological Materials

by



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Join ZOOM Meeting: <https://cuhk.zoom.us/j/94003130202>



ALL INTERESTED ARE WELCOME

Abstract

Topological materials are characterized by robust physical signatures, like anomalous surface states, that are derived from the topological distinction between their ground states and those of their conventional counterparts. The research in these quantum materials has led to a new paradigm in condensed matter physics in which the synergy between topology, symmetry, and quantum entanglement plays a key role in our physical description of the systems. In this talk, we will focus on how this paradigm shift has enabled a modernization of the nine-decade old theory of electronic band structures, and how this modern perspective is well-suited for the efficient discovery of topological materials including insulators, semimetals, as well as superconductors.