



THE CHINESE UNIVERSITY OF HONG KONG
Department of Physics
SEMINAR

Deciphering the Enigma of Superconductivity by using Resonant Inelastic X-ray Scattering

by

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ALL INTERESTED ARE WELCOME

Abstract

The advent of modern synchrotron radiation facilities provides new powerful experimental tools to study strongly correlated quantum materials where the complex interplay of charge, spin, orbital, and lattice degree of freedom often leads to emergent phenomena. In this talk, I will briefly introduce the basic principle of resonant inelastic x-ray scattering (RIXS) technique and its application to the study of diverse quantum materials. Recent research efforts, especially to address some of outstanding questions in superconducting cuprate and nickelate materials will be introduced as an example to show the great potential of RIXS in providing new insights for the fundamental understanding of quantum materials.