



講演題目：

X-ray Observations of Galactic PeVatrons:
Probing the Most Energetic Particle Accelerators in the Milky Way

日時：2026/04/17 (金) 15:00-16:00

講演者：Kaya Mori (Columbia University)

場所：物理会議室(理学部1号館4階)

概要：

The recent discovery of ~ 50 ultra-high-energy (UHE; $E > 100$ TeV) gamma-ray sources, together with neutrino emission along the Galactic Plane, provides compelling evidence for the existence of Galactic PeVatrons. Previous studies of TeV gamma-ray sources have demonstrated that X-ray observations play a crucial role in identifying these extreme particle accelerators by detecting synchrotron emission from primary and secondary TeV-PeV electrons. In particular, combining broadband spectral energy distributions (SEDs) and morphological data in the X-ray and TeV bands offers a powerful tool for investigating particle acceleration, transport and energy-loss mechanisms. In this talk, I will highlight recent X-ray observations of Galactic PeVatron candidates, including young supernova remnants, pulsar wind nebulae, micro-quasars and so-called dark PeVatrons. I will also discuss future prospects in this fast-growing field.