



Physics Colloquium

Unlocking the Deepest Mysteries of the Universe with a Deep Underground Liquid Xenon Observatory



October 23, 2024 (Wednesday)



10:00 a.m.



MWT6, 1/F, Meng Wah Complex,
Main Campus, HKU



Prof. Jianglai LIU

Shanghai Jiao Tong University

Abstract:

Dark matter and neutrinos are elusive neutral matter filling up our Universe. The PandaX (Particle and Astrophysical Xenon) experiment, located in the China Jinping Underground Laboratory under a 2400-m rock overburden, is dedicated to searching for dark matter particles and studying the fundamental properties of neutrinos. In this talk, after an overview, I will present recent results from PandaX, and discuss the future prospects.

Biography:

Jianglai Liu obtained B. S. in Physics from Nanjing University in 1998. He received a Ph.D. degree in Physics in 2006 from the University of Maryland. He held a postdoctoral and then senior postdoctoral scholar position at Caltech from 2006 to 2010. He joined the School of Physics and Astronomy (SPA), Shanghai Jiao Tong University in 2011, and became a full professor in 2016. He serves as the Deputy Director of the Tsung-Dao Lee Institute (TDLI), and is a Hongwen Distinguished Professor jointly appointed between TDLI and SPA. He has worked on various experiments in the intersections of nuclear physics, particle physics, and astrophysics. He currently serves as the spokesperson of the PandaX experiment, a xenon-based dark matter and neutrino experiment at the China Jin-Ping Underground Laboratory. He was awarded the Outstanding Junior Investigator from the National Natural Science Foundation of China in 2015. He received the Wang Ganchang Prize from the Chinese Physics Society and the Xplorer Prize from the Tencent Foundation (2019). Since 2023, he has been sponsored as a New Cornerstone Investigator (www.newcornerstone.org.cn).