



東北大学 宇宙創成物理学国際共同大学院プログラム

GP-PU (Graduate Program on Physics for the Universe) Seminar

“Neutrinos in core-collapse supernovae and in neutron star mergers”

by Meng-Ru Wu (Academia Sinica)

Time and Date: 14:00-16:00, June 1st, 2022

Registration: "<https://us02web.zoom.us/meeting/register/tZ0qc-yqpzsjGtbyYwzyXGFA3KqAddML2hvn>"

► Abstract

Neutrinos play pivotal roles in explosive astrophysical events involving hot-and-dense matter like the core-collapse supernovae and the merger of two neutron stars by affecting their dynamics and composition. In this talk, I will first introduce the basic ideas of neutrino emissions from these objects. I will then discuss some of the recent theoretical developments in elucidating the role of neutrinos in terms of both neutrino-matter interaction and neutrino flavor oscillations. Potential implications that we may learn from the next galactic supernova as well as the associated caveats will be addressed.

Contact : Yusuke Tanimura (E-mail: tanimura@nucl.phys.tohoku.ac.jp)