



# “Pursuing Origins of Cosmic High-energy Neutrinos”

**by Shigeo Kimura (Tohoku University)**

**Time and Date: 15:00-17:00, Dec 18, 2024**

**Place: Room 541, Science Complex B (H-03) (hybrid)**

**Registration: "**[\*\*https://us02web.zoom.us/meeting/register/tZMvc-uhrDktHdxh79xkyD-uQqpTHeXCSFRr\*\*](https://us02web.zoom.us/meeting/register/tZMvc-uhrDktHdxh79xkyD-uQqpTHeXCSFRr)**"**

Cosmic high-energy neutrinos are expected to be a smoking-gun signature to identify origins of high-energy cosmic rays. IceCube experiment reported detection of cosmic high-energy neutrinos in 2013, the origin of which became a new mystery in astrophysics. In order to identify the cosmic neutrino sources, multi-messenger observational and analysis technics are now rapidly developing. In this talk, I will review the progress of high-energy neutrino astrophysics, discuss high-energy neutrino emission from the vicinity of supermassive black holes, and introduce our effort to identify neutrino sources using optical observational data.

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