



Tuesday, Mar 10, 4:15pm | PAB 4-708 | Zoom: 517 486 4983

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## The Flavor Composition of the High-Energy Cosmic Neutrino Sky: Today and Tomorrow

Neutrinos of cosmic origin are unique messengers to investigate the Universe. The discovery of TeV-PeV neutrinos of astrophysical origin opened a new window to the cosmos. The flavor composition of these neutrinos has emerged as a versatile probe of both high-energy astrophysics and fundamental physics, as it carries information on the neutrino production mechanisms and propagation effects across cosmological distances. In this talk, I will discuss physics scenarios that the flavor composition can probe, what the current IceCube data reveal, and how future capabilities will be improved with next-generation neutrino telescopes.