



University
of Victoria

PHYSICS AND ASTRONOMY COLLOQUIUM (Online)

Naoko Kurahashi Neilson
Drexel University

“Neutrino Astronomy, From Dream to Reality”

Abstract

“The Universe has been studied using light since the dawn of astronomy, when starlight captured the human eye. The IceCube Neutrino Observatory, located at the geographic South Pole, observes the Universe in a different and unique way: in high-energy neutrinos. IceCube's discovery in 2013 of a diffuse celestial neutrino radiation started an era of neutrino astronomy. Searches for astronomical sources responsible for creating these neutrinos have been ongoing for over a decade, covering broad categories of signal hypotheses while combating background rates that are many orders of magnitude higher. This year, the first observation of our own Milky Way galaxy in neutrinos was announced, marking the start of Galactic neutrino astronomy. This talk will cover how this observation was made, other milestone observations by IceCube, and the state of neutrino astronomy.”

Wednesday, November 8th, 2023

3:30 p.m. PST

Zoom link available on Uvic Event Calendar