



Department of Physics Colloquium

February 19, 2024



3:00 PM

Neutrino Astronomy: From Dream to Reality

Naoko Kurahashi Neilson
Drexel University

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 celestial neutrino radiation started an era of neutrino astronomy at the boundary of particle physics and astrophysics. Last 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.

This colloquium will be held in-person, in SERC 116