

Naoko Kurahashi Neilson – HEP Seminar – January 16, 2024
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Title: 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. 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, and will review other milestones in neutrino astronomy. Finally, an outlook for the coming decade and the need for a global strategy will be presented.