Contribution ID: **1** Type: **oral**

IceCube: The Discovery of High-Energy Cosmic Neutrinos

Thursday, January 7, 2016 11:00 AM (45 minutes)

The IceCube project has transformed one cubic kilometer of natural Antarctic ice into a neutrino detector. The instrument detects more than 100,000 neutrinos per year in the GeV to PeV energy range. Among those, we have recently isolated a flux of high-energy cosmic neutrinos. I will discuss the instrument, the analysis of the data, and the significance of the discovery of cosmic neutrinos. The high cosmic neutrino flux observed indicates that proton accelerators generate a significant fraction of the radiation in the non-thermal universe.

Author: Prof. HALZEN, Francis (WIPAC University of Wisconsin-Madison)

Presenter: Prof. HALZEN, Francis (WIPAC University of Wisconsin-Madison)