

PHYSICS AND ASTRONOMY COLLOQUIUM

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"Not of this Earth: The Advent of Neutrino Astronomy"

Abstract

Scientists have created the world's largest neutrino telescope, the IceCube Neutrino Observatory, in one of our planet's most extreme environments at South Pole Station Antarctica. Instrumenting more than a gigaton of ice, the observatory is designed to detect interactions of the highest energy neutrinos expected to be produced in the Universe's most violent astrophysical processes. With IceCube's recent announcement of the first detection of a diffuse flux of high-energy neutrinos (30 TeV to more than a PeV) of extraterrestrial origin, a new window to study the Universe was opened. In this talk I will present the very latest results from IceCube and discuss what they imply for the emerging field of neutrino astronomy.

Wednesday, March 12, 2014 3:30 p.m. Bob Wright Centre A104