Observation of High-Energy Neutrinos with IceCube

Friday, 16 August 2013 08:30 (30 minutes)

The origin of high-energy cosmic rays is one one of the most persistent mysteries in physics. Neutrinos, as neutral tracers of hadronic acceleration, may offer a new and unique window into this problem and others in high-energy astrophysics. This talk will discuss recent results from the antarctic IceCube neutrino observatory, the first operating gigaton-scale neutrino detector, showing first evidence for a population of extremely high energy neutrinos (100+ TeV) that cannot easily be explained by processes occurring in cosmic ray showers in the Earth's atmosphere and may represent the first evidence for a population of high-energy neutrinos of extraterrestrial origin.

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