



NEUTRINOS FROM THE GALAXY AND BEYOND: ASTROPHYSICS WITH ICECUBE

Justin Vandenbroucke | WIPAC/UW-Madison

The IceCube Neutrino Observatory features a billion tons of ice at the geographic South Pole monitored for neutrino interactions by thousands of photomultipliers. A decade ago, IceCube discovered that the Universe glows brightly in high-energy (TeV-PeV) neutrinos. I will present our measurements of the total astrophysical neutrino flux and recent progress in understanding its origins, in particular from Seyfert galaxy NGC 1068 and from our own Milky Way. I will also present our searches for neutrino counterparts of transient astrophysical signals including fast radio bursts, gamma ray bursts, and gravitational waves.