



Contribution ID: 100

Type: Oral

Improving the angular resolution in IceCube cascade reconstruction

Tuesday 8 August 2017 17:00 (15 minutes)

Neutrino interactions occurring in IceCube require accurate reconstruction techniques to quantify the neutrino's energy and arrival direction. At the highest energies, the angular resolution of IceCube is limited primarily by ice property uncertainties. Previous studies have shown that a perfect knowledge of the ice may improve cascade angular resolutions by a factor of two or more. We present a new method for evaluating the effect of ice model uncertainties and explore several channels by which the reconstructed angular resolution may be improved.

Author: YUAN, Tianlu (UW Madison)

Presenter: YUAN, Tianlu (UW Madison)

Session Classification: Neutrinos

Track Classification: Neutrinos (astrophysical, atmospheric)