38th INTERNATIONAL CONFERENCE
ON HIGH ENERGY PHYSICS
AUGUST 3 - 10, 2016
CHICAGO

Contribution ID: **398** Type: **Poster**

Studying Neutrino Oscillations with Atmospheric Neutrinos in DUNE

Monday, 8 August 2016 18:30 (2 hours)

The 40kt DUNE Far Detector, located at the Sanford Underground Research Facility, will offer unique capabilities for the study of atmospheric neutrinos. Due to the detector¹s excellent energy resolutions, angular resolutions, and particle ID capabilities, atmospheric neutrino analyses in DUNE can provide valuable information about 3-flavor oscillations, despite the relatively modest statistics. These data provide a complementary analysis approach to beam neutrinos, and can help resolve ambiguities in beam-only analyses. In this talk we will focus on the determination of the mass hierarchy, octant of theta23, and measurement of Delta_CP using atmospheric neutrinos in DUNE.

Presenter: CORWIN, Luke (South Dakota School of Mines and Technology)

Session Classification: Poster Session

Track Classification: Neutrino Physics