Contribution ID: **345** Type: **Parallel Session talk**

Near Detectors for the Hyper-K Experiment

Tuesday 6 August 2019 16:30 (12 minutes)

Summary

The neutrino oscillation measurement program of Hyper-K requires unprecedented accuracy for the modeling of neutrino fluxes and neutrino-nucleus interaction cross sections. The Hyper-K experiment will include a suite of near detectors to control systematic uncertainties on neutrino flux and interaction models. In this talk we will describe the baseline Hyper-K near detector suite, which includes beam direction measurement detectors, a magnetized tracking detector, and a kilo-ton scale water Cherenkov detector. We will discuss the measurements these detectors will make to control systematic errors for the accelerator-based neutrino oscillation program, as well as the atmospheric neutrino and nucleon decay programs of Hyper-K.

Authors: HARTZ, Mark; HYPER-K COLLABORATION

Presenter: HARTZ, Mark

Session Classification: Rare Event Detectors (Parallel)