Contribution ID: 719 Type: Talk

## **Near Detectors for the Hyper-K Neutrino Experiment**

Wednesday 29 July 2020 19:00 (15 minutes)

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.

## I read the instructions

## Secondary track (number)

13

Primary author: Dr HARTZ, Mark (TRIUMF & Kavli IPMU, University of Tokyo)

Presenter: Dr HARTZ, Mark (TRIUMF & Kavli IPMU, University of Tokyo)

Session Classification: Neutrino Physics

Track Classification: 02. Neutrino Physics