

MEETING OF THE AMERICAN PHYSICAL SOCIETY DIVISION OF PARTICLES AND FIELDS

Contribution ID: 416

Type: Presentation

## protoDUNE-SP Cold Electronics Quality Control

Monday, 31 July 2017 14:45 (15 minutes)

The protoDUNE-SP detectors are large-scale prototypes of the single-phase Liquid Argon Time Projection Chamber (LArTPC) and cold electronics designs proposed for the Deep Underground Neutrino Experiment (DUNE). TPC wires will be instrumented by 15360 readout channels implemented with low noise shapingamplifier and digitization ASICs integrated into Front End Motherboards (FEMBs) operating at cryogenic temperature within the cryostat. The large number of electronics channels and high performance specifications require a large-scale production electronics quality control effort including highly automated test methods under realistic cryogenic operating conditions. This talk will summarize the protoDUNE-SP cold electronics quality control plan, details of its implementation and preliminary results.

Primary author: KIRBY, Brian (Brookhaven National Lab)Presenter: KIRBY, Brian (Brookhaven National Lab)Session Classification: Particle Detectors

Track Classification: Particle Detectors