Calibration and Cryogenic Instrumentation

News and Review Report Discussion

José Maneira, Anselmo Cervera, Sowjanya Gollapinni DUNE CALCI Call July 22, 2020



News



News 1/2 - ProtoDUNE

- Lots of Calibration activities last week at CERN <u>Mattia Fanì</u> and <u>Francesco Pietropaolo</u> working hard to make these happen
 - See Friday's PD meeting: https://indico.fnal.gov/event/44488/
- DD generator test
 - DD generator turned on! Data taken in asynchronous and pulserdriven trigger mode, downscaled to 2 Hz
 - Neutron yield stable. PD does see an increase in non-track related hits!
- Inclinometers test
 - Will be used to measure small effects of pressure swings on position of cryostat calibration ports - needed for loLaser precision
 - 4 inclinometers installed on PD-SP-I roof. Mattia already looking at the data.



News 2/2 - Tech. Coord.

- Electrical Instrumentation Cabling list in EDMS
 - EDMS link
 - Ongoing Google spreadsheet <u>link</u> (please continue to input information here)
- FD Installation Meetings started
 - Installation side: Jim Stewart, Bill Miller, Justin Freitag
 - CALCI side: Pablo Fernandez, JM + task leaders



Review Draft Report



CALCI Scope Review Workshop

- Dates: May 11 June 24
- Indico reference: https://indico.fnal.gov/event/24155/
- Review Committee
 - Co-Chairs: Eric James, Gina Rameika
 - Members: Flavio Cavanna, Alberto Marchionni, Michael Moody, Ryan Patterson, Francesco Pietropaolo, Stephen Pordes, Filippo Resnati, Kate Scholberg, Michelle Stancari, Marco Verzocchi, Michele Weber, Tingjun Yang
 - Ex-officio Members: Ed Blucher, Marzio Nessi, Stefan Soldner-Rembold
- Final Report on DocDB 20008
 - Link to DocDB 20008



Overview

- "committee members were asked to evaluate the subsystem elements in terms of criticality for their inclusion in the first DUNE detector module as either
 - essential, highly-desirable, advantageous, or low-impact."
- "overall conclusion [...] cryogenic instrumentation and calibration hardware is <u>essential</u> for monitoring the status and performance of the DUNE detector over the lifetime of the experiment."

Then each subsystem was ranked



Highlights from specific systems

Please see highlighted pdf version.

