



Detector Support Group

Weekly Report, 2019-06-12

Hall A - HCAL

- Cut, terminated, relabeled, and tested 72 LEMO-to-BNC cables.

Hall A – Bigbite - ECAL

- Assembled five Supermodules.

Hall A PLC

- Modified logic for three interlock signals: (-) Lead Drop, (+) Lead Drop, and Quench. After corrections to external circuitry driving these signals, 1 indicates good status, previously 0 did.


Hall B - RTPC

- Attached RTPC prototype to gas supply panel.
- Provided gas controls training for BONuS/RTPC group.
- Added Ar/CO₂ (90/10) mixture to gas selection for use as reference gas.

Hall B – Gas System

- Installed expansion cRIO chassis in gas shed since main cRIO chassis out of slots.

Hall B - RICH

- Actions taken to prevent N₂ flow loss if supply valve is closed.
 - ★ Added alarm to alert Hall B Engineering when main N₂ supply pressure drops below 20 psi (indicates activation of backup supply).
 - ★ Added alarm to alert Hall B Engineering when pressure of N₂ backup bank drops below 10 psi (indicates backup supply will run empty in 36 hours).
 - ★ Administrative lock-out tag and signage  applied to main N₂ supply valve to prevent **Bozos** closing the valve and screwing up a million dollar detector and destroying all ability to do physics.
- Developed supply distribution scheme, interconnects, and signal distribution of Sensirion SHT85 for sbcRIO.

Hall C - HV EPICS Test Station

- Development of EPICS database to control and monitor HV CAEN SY4527 power supply in progress.

Hall C EPICS

- Tested HV CSS screens.
- Developed two CSS-BOY screens to monitor forces for the SHMS Dipole and Horizontal Bender magnets; converted to WEDM for remote monitoring.

DSG R&D – cRIO Test Station

- Developed, tested, and debugged automatic RTD test for NI 9219.