Detector Support Group
Weekly Report, 2019-07-10

Summary

Hall A – Bigbite – ECAL
- Three supermodules assembled (in all, 53)

Hall A – Bigbite – HCAL
- Relabeled, tightened connectors on, and terminated 48 BNC-LEMO signal cables

Hall A – Gas System
- Meeting held to discuss scope of work on upcoming Hall A Super Bigbite gas system.

Hall B – LTCC
- Developed CSS-BOY screens for gas supply and purifier and added screens to *clascss*.
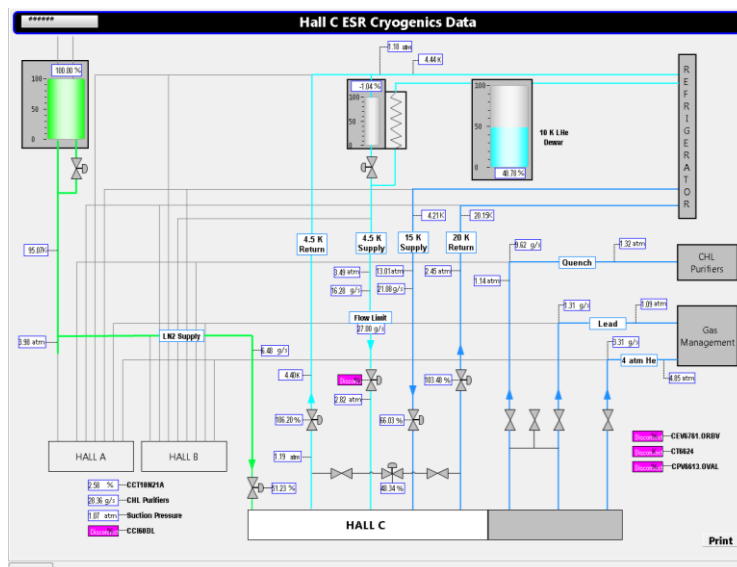
Hall B – Magnets
- Started FastDAQ modifications by changing LabVIEW program
  - ✶ FastDAQ cRIO sends data to PLC and EPICS
  - ✶ Test used baseline 10 kHz module acquisition rate with 5 Hz transmission rate to EPICS.

Hall B – RICH
- Added alarms for N_2 backup system pressure transducers to RICH alarms GUI and added screen to *clascss*.

Hall C – EPICS
- Reworked Python-based backup/restore program to remove dependency on *pyepics* and pre-defined file paths.
- Developed CSS-BOY screen for HMS Dipole Interlocks.
- Developed CSS-BOY screen for ESR cryogenics.

CSS-BOY screen for Hall C ESR Cryogenics

Hall C – CAEN HV Test Station
- Modified CSS-BOY screen for test station's expert GUI to test CAEN 7030TN modules.
- Modified manufacturing drawing of HV distribution chassis to reduce profile.

Hall D – WEDM
- Provided directory structure to *epicsweb* admins to create links in menu for Hall D screens.

HDice
- Replaced 24 V power supply in IGH with 30 V power supply.

DSG R&D – cRIO Test Station
- Completed NI9219 module manual voltage tests for differential nonlinearity, dynamic range, gain error, integral nonlinearity, and offset error for ±1 V, and ±0.125 V ranges.
- Completed NI9219 module automatic voltage tests for ±60 V range.