

HCAL Biweekly Meeting Minutes 7.7.21

Nominal Agenda:

- Update on work plans in hall.
 - Training requirements
 - New cable paths (under the pivot)
 - Beginning to recable HCal
- Progress on developed new event display for HCal (work in early stages)
- Trigger monitoring for overlapping region trigger
 - How many regions do we want to send to fADCs?
- Other topics

Attendance:

1. Sebastian Seeds
2. Scott Barcus
3. Brian Quinn
4. Donald Jones
5. Provakar Datta
6. Jim Napolitano
7. Bogdan Wojtsekhowski

Actual:

Scott

- Length of Cables
 - Not around hall, under pivot to ensure length of long cables is sufficient to connect HCal and DAQ bunker.
 - Takes 50 ft off of path length, should work now
 - Cables are behind BB, no conflict for movement of detector
 - Possible man-lift conflict
 - DAQ crates are now in DAQ bunker
 - fADC to patch-panel recabled with strain relief in mind
 - Extra infrastructure
 - Cable trays attached to HCal structure for signal and HV cable strain relief
 - Still need to wait on Jesse for long cables
 - F1TDC can be done
- New event display for HCal
 - Written in Python and TKEnter
 - Display is interactive, can't do this in root
 - MatPlot.lib isn't as fast as root
 - List of items from Bogdan
 - Move baseline to zero
 - Measure pedestal
 - Plot each channel relative to channel pedestal

- Color code or visual difference for peak height or integrated pulse level across channels
 - Energy deposition at a glance for clusters
 - Circles are best, no heat map legend necessary
- Spare ADC acquired
 - One channel used for ref time
 - 15 channels for monitoring
 - Supercluster sums into one ADC channel?
 - 64 channel sums each to single fADC
- Need to talk with Brad to determine full range of hardware/software requirements for GEN-rp
- Provakar
 - Need to perform cable delay analysis when using BB cables based on fADC time difference results between neighboring channels