

HCAL Biweekly Meeting Minutes 8.18.21

Nominal Agenda:

- Installation Update
- 60 Hz Noise on DAQ and FE electronics
- Calibration plans
- DAQ update

Attendance:

1. Sebastian Seeds
2. Brian Quinn
3. Arun Tadepalli
4. Scott Barcus
5. Jim Napolitano
6. Bogdan Wojtsekhowski
7. Brian Quinn

Actual:

Sebastian

- Simulations
 - New kinematics have difference between SBS angle and HCal angle
 - Need to simulate energy deposition from Hydrogen
 - Necessary to add /g4sbs/hcalang option independent of /g4sbs/sbsang
 - Sebastian to look into this

Scott

- Cabling HCal
 - Complete
- 60 Hz noise
 - Working to determine sources
 - Grounding has reduced noise from 150 mV to 15 mV
- Calibrations
 - Energy calibration
 - In advance with cosmics
 - Get elastic electron in BB, know proton energy
 - Determine coincident proton in hcal – calibrate signal pulse to energy deposited
 - Low energy resolution fixed by overwhelmed by statistics
 - Get sample code from Andrew, can loop in Donald Jones for help implementing
 - Should loop in Provakar to implement
 - Gain matching
 - In advance with cosmics
 - Find thresholds
 - Avg signal for quasi elastics (ADC)

- TDC (pending)
- Check trigger
 - PMT transit time differences
 - General check
- Match positions of HCal to BB
- DAQ
 - Analysis scripts run and decode pedestals from all 288 channels
 - HV GUIs working
 - Functionality on enpcamsonne pending transfer to a-onl CH computers