ECal Commissioning

Assembly and Installation

- Assembly of the calorimeters (done)
- All channels are checked with pulsed light (done)
- ECal moved to the hall (week of 09/01)
- ECal Mounting structure installed (week of 09/22)
- Connections (2 weeks from 09/29)
    - Install and connect the chiller
    - Install and connect LV/HV ("manual" control)
    - Connect the LED controllers
    - Connect to DAQ

ECal Commissioning

Installation on mounting structure in Hall B

(week of 09/22)

- Take reference marks on vacuum chamber and detector with the help of a mockup vacuum chamber
- Place the calorimeter on its mounting system
- Reinstall the ECal vacuum chamber
- Make precise placement of the Ecal using previous marks to keep away from the chamber
- Survey its final position

ECal Commissioning

Off beam commissioning in Hall B

- Test data acquisition (week of 10/13)

  - Take LED test data that will serve as reference to monitor gain variation of the system during the run

  - Take Cosmic ray data. We expect a rate of about ~50 mHz → ~5 hours runs for calibration of all channels

- Establish a first calibration map for FADCs

  (To be improved while we run longer cosmic runs)

ECal Commissioning

With low current beam

- Verification of rates in the crystals with target
- Measurement of Coulomb scattering gives high rates (>kHz) of electrons of known energy
  - Gives good fast calibration but miss the sides of the detector other methods will be used for the sides (SVT track based & pi0)
- Adjust the various ADC thresholds on FADCs accordingly
- Verification of the trigger rates of the main trigger and other triggers