

# Accelerator Status Report

## 4/30/2008

### Accelerator

Machine energy at 1130 MeV/pass

- BLM faults (AT07, 3C12....) appear to be caused by RF instabilities
- **BLM faults may be aggravated by**
  - Warm RF drift (Laser or pre-buncher phase, bunchlength , ect)
  - Aperture Steering
  - Changes in path length
- **Additional beam faults and bad FOPT data caused by MQA4R06 cycling error**
  - Trim card changed
  - Watch for reoccurring magnet mismatches
- **Keep KREST running**
- **May need to adjust laser phases after a spot move**
- Energy drifts in the halls were due to path length changes caused by a configuration error in the MOMOD system (new failure mode)
- Channel access semaphore problem has returned
- Do not change the hall dipole string settings to correct for energy shifts without PD and RC approval.

### Hall A

E04-007: Precision Measurement of Electro production of pi0 Near Threshold

- 1 pass 1.193 GeV; max current 15 uA, Compton on
  - **Will go to 2 pass on Mon or Tues**
- **FFB in Position and Energy mode**
  - Slow target lock on
- Watch for shifts in energy which cause detector trips in Hall A
  - May be caused by drifting path length or unstable RF

### Hall B

g12

- 5 Pass 5.713 GeV, max current 80 nA
- Keep the Tagger viewer on. Set the "Hall B T Dump" input to MaxVid 1 Data on the Video Cross point Switcher whenever it is not in use elsewhere.
  - Remember to run the setup script for Hall B Tagger Dump if requested
- **Current instabilities may be caused by A1, A2 steering, Hall B laser phase or loss of accelerator orbits when Hall C is not running.**
- **Establish beam to Halls A and C first to avoid over current trips**

### Hall C

GEP/GMP via recoil polarization and Two-Photon Exchange

- 5 pass 5.713 GeV; max current 80 uA
- Follow the new procedures for Moeller runs or energy measurements.
- **FFB on in position mode**
  - **Switch to energy mode when Hall A is down**
  - Slow target lock on
- **Watch for shifts in energy caused by drifting path length or unstable RF**