

Accelerator Status Report

5/7/2008

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

- **2 Pass 2.323 GeV; max current 15 uA, Compton on**
- **Will turn off for experiment change over on Thursday 5/8/2008**
- **Will return at 1 pass 1.194 GeV on Friday 5/16/2008**
- 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
- **An energy tail may appear on the Hall B tagger dump screen.**
 - **Adjust the pre-buncher or B laser phase to fix this**

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
- Watch for shifts in energy caused by drifting path length or unstable RF