

Accelerator Status Report

5/14/2008

Accelerator

Machine energy at 1130 MeV/pass Asymmetric setup NL = 555 MeV, SL = 575 MeV

- Done at the request of the Halls to provide higher polarization to A and C without changing the energy
- East spreader and re-combiner orbits will not be zero
- RER requested for AT line vacuum leak
- 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
- Watch for reoccurring magnet mismatches or trim rack problems
- 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

E08-007: Measurement of the Proton Elastic Form Factor Ratio at Low Q²

- Currently offline for configuration change
- Will return at 1 Pass 1.193 GeV on 5/15/2008
- Max current 15 uA, Beam in Compton
- 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 phase 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 100 uA
- 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**