HRS Detector Update

Vincent Sulkosky

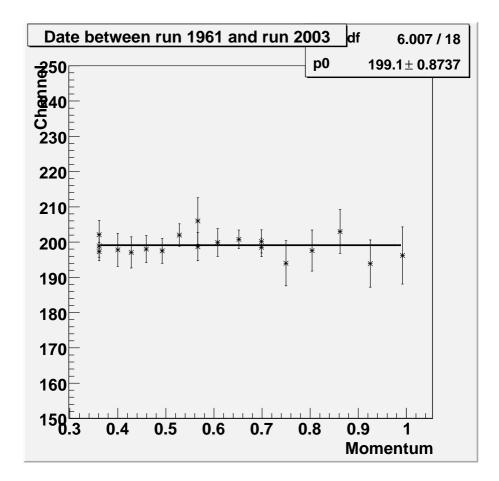
Transversity Collaboration Meeting

May 2nd, 2008

- Gas Čerenkov checked out during E05-110.
- Should check status during the current run period.
- Check PR during April and May running.
- PID calibrations (C. Dutta and Y. Wang).
- Working on coincidence timing and TOF measurements using E01-015 data, which used S2m (C. Dutta).
- We can also study with data from this Spring.

Short Gas Čerenkov Status

Single photoelectron was aligned to channel 200:



Plot from Y. Wang

Short Gas Čerenkov Status

PMT	# γ e	# γ e (div. by 0.8)
1	6.77	8.46
2	5.61	7.01
3	6.69	8.36
4	6.92	8.65
5	6.33	7.91
6	5.93	7.41
7	6.12	7.65
8	7.19	8.99
9	6.20	7.75
10	5.69	7.11

from Y. Wang

- We wanted to install A1 now and test during E04-007.
- Decided not to install and keep A1 in the Hall during the long summer down.
- PMT testing continued to find 5 replacements for A1 (Youcai and Bogdan).
- Need a few LeCroy postive HV cards to complete tests: status unknown.
- When will A1 be ready and when do we need it ready?
- Wait to install A1 until RICH is ready to be installed.

S2M Status and Plans

- Check status of S2M electronics on L-HRS:
 - Create inventory of electronics: Completed.
 - Identify any missing components.
 - Locate HV and signal cables: Not Found.
 - Complete during May switch-over.
- Installation:
 - Would like to install soon after June shutdown.
 - Have S2m installed and ready by end of June for checkout.
 - Install no later than end of August.

S2M Status and Plans

- Check Coincidence timing and TOF using SRC data from 2005.
 - Become familiar with software.
 - Check resolution obtained with S2m.
 - Identify potential bottlenecks in timing resolution.
 - Goal: complete by end of May.
 - Manpower: C. Dutta.
- Develop plan for TOF measurement using beam bunch timing as was done for G_E^n (May 31).