HRS Detector Status: S2M and A1 Commissioning

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Transversity Collaboration Meeting

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A1 Status

- 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).
- Youcai will install PMTs and begin tests with cosmics soon.

S2m Status

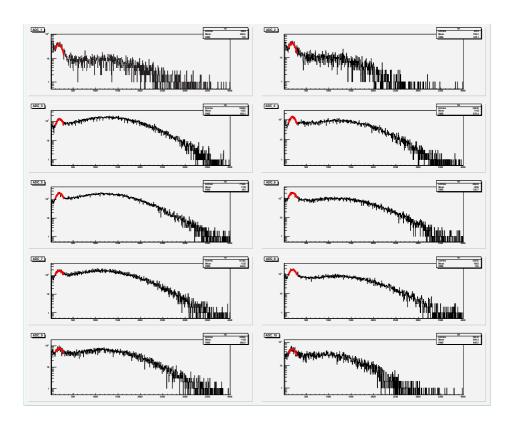
- PMT checkout was performed last summer.
 - No significant light leaks found (S2-14R).
 - Amplitudes measured using cosmics.
 - A few PMTs have low signals (@ -1500 V).
 - Checked PMT and light guide connections to paddles: No problems found.
- The detector was not installed for CSR and will not be installed for E04-007.

L-HRS Detector Plans

- Gas Cherenkov and PR detector checkout during E05-110.
- PR was not so useful with Nal in front of it.
- Check PR during April and May running.
- PID calibrations (C. Dutta and Y. Wang).
- Need to check coincidence timing and TOF measurements (using E01-015 data).

Short Gas Čerenkov Status

- Single photoelectron was aligned to channel 200.
- Number of photoelectrons: 6-7, channels 2 & 10 have \approx 6 PE.



Plot from C. Dutta

A1 and S2M Milestones

A1 Aerogel:

- PMT tests and replacement (end of March to Mid-April)?
- A1 should be ready to install by June 8.
- We may want to wait to mid-Summer to do the installation.

A1 and S2M Milestones

S2M:

- Check Coincidence timing and TOF using SRC data from 2005.
 - Become familiar with calibration software.
 - Check resolution obtained with S2m.
 - Identify potential bottlenecks in timing resolution.
 - Goal: complete by early to mid-May.
 - Manpower: Youcai.

A1 and S2M Milestones

S2M:

- Check status of S2M electronics on L-HRS (de-installed in 2006).
 - Create inventory of electronics.
 - Identify any missing components.
 - Locate HV and signal cables.
 - Complete before Pi-0 starts up.
- Develop plan for TOF measurement using beam bunch timing as was done for G_E^n (May 31).

S2M and A1 Installation

S2M:

- 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 and A1 Installation

A1:

- Installation probably tied to RICH installation.
- Could A1 be installed before the RICH.
- Would we want a trigger for A1 or a clean Kaon trigger?