

High Resolution Spectrometer Status

Big Bite Family Readiness Review March 19th 2007 Alexandre Camsonne

Requirements

- Trigger for transversity experiment

 Pion electron coincidence with BigBite
- Pion rejection at 2.4 GeV/c range – Rich upgrade

Left HRS

- Planned detector stack
 - S1
 - A1
 - Gas Cerenkov
 - RICH
 - -S2m
 - Pion rejector

Left HRS

- Cuurent detector stack
 - S1
 - S2
 - Gas Cerenkov
 - Pion rejector

Scintillator plane status

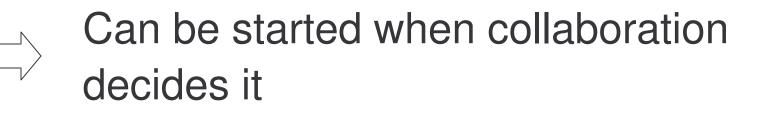
- S1
 - Installed since June 2006
 - S1 PMT tubes replaced for He3 elastic
- S2m
 - Not used since about 1 year
 - Can be installed at next down
 - Usual checks for signal and calibration

Pion rejection

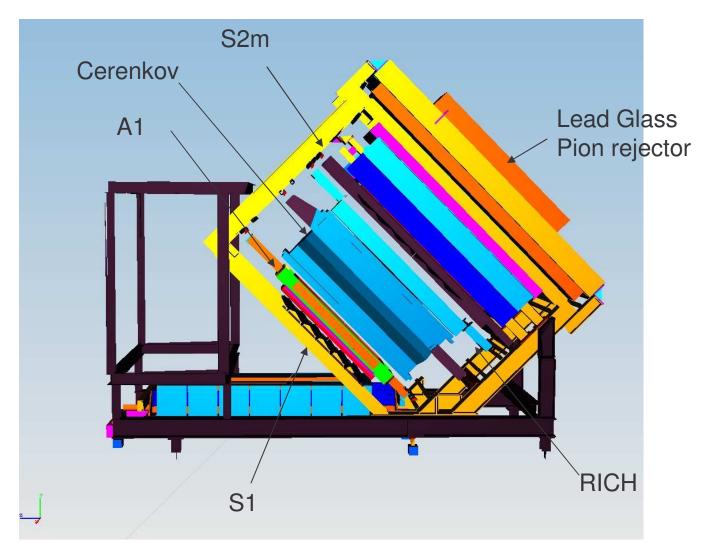
- Gas Cerenkov
 - 1 tube replaced
- Pion rejector
 - 2 layers of lead glass installed since June
 2006
- Detectors used since june 2006
 Coulomb Sum Rule, He3 elastic, LEDEX eD

Aerogel counters

- A1 and A2 not used since many years
- Needs refurbishing
- Estimation 2 or 3 man/month work
- Aerogel replacement
- Reflector replacement



Detector stack



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Timeline

- Jun 25 2007 summer down
 - -A1 refurbishing
 - S2m installation
- Oct 1st 2007
 - Coulomb Sum Rule running (S2m, gas Cerenkov, pion rejector checkout)
- Jan 2008
 - Installation A1
 - Installation RICH

Conclusion

- Final detector stack for HRS finalized
- No major issues besides usual detector maintenance