

LEDEX meeting minutes – 2006/06/21 (rg)

Adam talks about run plan. Eugene needs about 5-6 hours for a first Moller measurement. The greater than usual time is to do optics for our low beam energy. We discuss the order of the gamma d and ep calibration runs, radiator thickness checks, ep proton cross section measurements, etc. Adam distributes a plan, for us to read and comment upon. We need to talk with Jack and make a final decision about using S0 vs the HAPPEX scintillator.

Jonathan report calorimeter is going well. Arne expects we will be done and ready for installation before July 4.

Guy finds high rates in slots 0, 8, and 9 in the FPP. Slot 0 is someone else's stuff. He finds some channels have no rate, some have low rates. Alex has online software working, and likely today Bogdan can do other detector testing. Subsequently Mark and Guy find slot 8 is noisy because RG plugged in the TDC cables off to the side, on only one pin of each pair. Mark also finds a gas flow problem in chamber 1; it appears some of the gas manifolds have broken and need to be fixed.

Emily's BCM work is going well. Steffen will take over shift requests when Emily is out of town. Emily is also working on EPICS readout etc. Doug says the shift schedule is gradually filling up, but we are weak on cryo-target operators.

Steffen and Gerfried are putting the radiator together. It is about ready to be worked on by Dave Wetherholt from the accelerator software group. (Subsequently the radiator was driven by the software, and in consultation with Al Gavalya, it was decided to redo the pin that triggers the limit switches. Also, Dave Meekins supplied a 50:1 gear reducer so we can get a slower steadier movement of the radiator – simply driven by the stepper motor it appears to naturally turn under the initial version of the software at several Hz. The software is now about set, but there are some finishing details needed for both software and hardware.)

Jackie has just the new FPP analysis software just about done.

Adam asks how we determine the beam energy for ed. We have kinematics in the Hall and beam transport in the first accelerator arc. The ep and arc systems in Hall A will not work at 362 MeV. Originally we were going to use these systems, when we planned the experiment for 600 – 800 MeV. It is likely that we will have 10^{-3} knowledge of beam energy, and it will become the leading uncertainty in our determination of Q.

Bogdan has been finding some good, but some bad PMTs. Afterpulsing within 200 ns is at the level of 10%, but he suspects over a longer time scale much higher probability. The correlated in time afterpulsing leads to problems using scaler rates to do dead time corrections, for example. The PMTs will be replaced by Bogdan along with Zein-Eddine's student.

The meeting ends early, after only 40 minutes, so the Rutgers gang can return to the Hall to play with the radiator.