

g2p/gep Target Meeting Minutes

Date: 1/27/2011

Attendees : J. P Chen, C. Keith, D. Higinbotham, K. Allada, J. Zhang, Al. Gavalya, Narbe Kalantarians

1. Acceptance issues with GEP:
 1. GEP expt at 80deg spin rotation will not be able to run 12deg spectrometer setting (coils are on the way)
 2. Even for 6deg there is partial loss of acceptance due to 2cm raster and extended target.
 3. Doug and Guy Ron are looking at alternatives settings, like running at 20deg rotation or reducing the target size etc..
2. NMR coils :
 1. JP raised question of NMR coils in the target. Since g2p is a cross-section*asymmetry measurement, NMR coils in the target can potentially introduce uncertainties.
 1. Is it possible to put coils just outside the target (like Hall-B did?)
 2. Is it possible to put coils on the inside edge of the target without actually in the beam path?
 3. C. Keith pointed out that both these options will introduce additional uncertainties on the NMR measurement. Need to find out from Hall-B data, what is the level of uncertainty?
3. C. Keith:
 1. Target group is currently busy with Hall-A /B installation. No significant progress since last meeting.
 2. There is progress with rotating seals. They have been tested and working smooth, can rotate 360deg
 3. UVA did target cooldown last two weeks. It went without any major problems
 1. Two out of three cups of target were tested.
 2. Narbe checked with Josh about the probe to measure field alignment, which is in UVA , and he did not bring it to Jlab this time.
 3. About 90% polarization was achieved
 4. Narbe mentioned that irradiation MOU with NIST is ready for signatures
 5. Magnet was shipped from Oxford already. Should be here soon ?
 4. Chris mentioned that he did not talk to the alignment group yet.
4. JP asked if there is any plan to automate the microwave adjustment feedback
 1. Chris mentioned that it needs some work and need a good algorithm (not trivial)
5. Kalyan wanted to know from Al Gavalya whether it is possible to put a small detector (lead-glass) on the target platform for detecting elastic electrons. Al will take a look at this issue and get back.