

Hall C Operations re NPS
Jay Benesch
17 April 2019

Outline

- Procedures
- Raster
- FSD
- Stray field
- Summary

Procedures

- http://opsntrsvr.acc.jlab.org/ops_docs/online_document_files/MCC_online_files/HallC_beam_delivery_proc.pdf
Hall C beam delivery procedure
- http://opsntrsvr.acc.jlab.org/ops_docs/online_document_files/MCC_online_files/HallC_energy_measure_proc.pdf
Hall C energy measurement procedure
- Hall C ion chamber calibration procedure
- http://opsntrsvr.acc.jlab.org/ops_docs/online_document_files/MCC_online_files/Hall_C_ion_chamber_functional_test_proc.pdf
Hall C ion chamber functional test procedure
- http://opsntrsvr.acc.jlab.org/ops_docs/online_document_files/MCC_online_files/hallC_target_raster_proc.pdf
Hall C target raster setup procedure
- Hall C Moller polarimeter measurement procedure will be revived by October 1, 2019

Raster

- Raster is last active element in C line; no optics issues like in A. At raster current 50A and 1090 MeV/linac, expect ± 3.1 mm displacement in either plane at pivot. A test will be performed to calibrate the raster via BPM and detector event mode on carbon hole target.

FSDs

- There are at least a dozen empty inputs to the FSD cards which handles Hall C.
- Card which handles target-vicinity ion chambers has four empty inputs so only a properly conditioned signal will be required.
- Notice to SSG soon will suffice to get work done during the autumn down.

Stray Field

- I have reviewed Bogdan's model of the NPS magnet and compensating elements. There does not appear to be a stray field problem.
- If there is an unmodeled stray field issue, the dump ion chambers and aperture plate will prevent any damage to the dump. The consequences for the experiment are beyond my remit.

Summary

- Nothing to see here, move along.