

PEPPo Concept

Proof-of-principle, alike helical undulator & Compton backscattering
Olsen Maximon vs. Contemporary Calculations vs. data point
Contribution to the Geant4 code/community

CEBAF Injector

Precision polarized electron beam
Good diagnostics (spectrometer, Mott, position/current)
Space for PEPPo-sized apparatus
Good overlap between experiment & system ownership

Electron beam "spigot"

Reasonably straight-forward components, but need plan
Integrated design optics, dipole dispersion
Target - need to reconcile $\#$ /thickness of targets, tilted concept?

E166 Collection System

Target Solenoid - Seems OK plan, requires big power supply
Spectrometer - many unknowns (field map, jaws, apertures)

Diagnostics Line

Seems like good idea, but making life complicated or easier?

Really meant to help characterize setup w/ electron beam

Integrated positron annihilation counter (dedicated foil, vacuum window)

Compton transmission polarimeter

E166 analyzing magnet to ship soon, first component to be on-site

Riad's suggestion of a permanent magnet (in vacuum?)

Need assess how far reconversion foil can be from analyzing core

Detector at Grenoble - good progress, well developed plan/schedule

Need to integrate JLab/Grenoble design(ers)

Some concern over arrival date ~April; may/may not be issue...

Mott & DAQ based on FADC

Testing accelerator waters - data rates, CODA, etc.; good progress

System largely loaned, borrowed, some purchased components

New detectors ready, installed next break/down

Parasitic running during SAD to study analyzing power

Compton Transmission DAQ based on FADC

Thoughtful Plan A, B, C; need to determine what is required/liked

Critical system component - need more developed plan/strategy

Hardware punchlist, purchasing timeline - relatively expensive purchases

New FADC => new firmware needs/request

Old FADC => backup plan for polarimeter DAQ? (use old Mott DAQ)

Integration w/ other detectors, i.e, is Compton DAQ PEPPo DAQ?

Running CEBAF during shutdown

Installing PEPPo & running PEPPo are two different issues

No LCW until Sept. 15 => facilities investigating temp solution; show stopper

Temporary reconfiguration of beamline, PSS, radiation shielding => big job

Need to converge integrated design/layout for radiation/safety estimates

More realistic estimate of beam requirements during shutdown (pulsed/CW)

Segmentation plan needs review, goal: thumbs up/down ~Feb. 1

Resources (time, \$) spent configuration/unconfiguring injector better spent?

Alternatives - plan A, B, C...

PEPPo Collaboration/Support/Arrangements

JLab/LPSC - long term R&D effort => PhD student

ILC e+ R&D funding => reporting to ILC working group

Interest by ILC working group to send post-doc ~6 months

Collaboration on DAQ - Alexandre, Dave, Chris

JLab/Idaho MOU for positron R&D - Tony (e+ counter), Yujong

JLab/DESY MOU for analyzing magnet, collaboration w/ Peter Schuler

JLab/SLAC-Princeton MOU for collection magnets

Collaborators a INJR-BLTP, Kharkov, CEA?

Overlap with LAL/SuperB

New interest by Bogdan/Serkan & Paul/Hampton U. ?

JSA travel support

JLab/SLAC-Princeton MOU for collection magnets TBD

Organization/Planning

Setup some infrastructure to help manage information, results

Begin weekly status meetings

Develop & integrate activities for experiment review by ~Feb. 1