e+LOI for PAC46

1. Introduction (Eric)

2. Physics motivations (Eric)

Interference physics & experimental observables, physics beyond the standard model

3. Source description and challenges (Joe/Eric)

PEPPo scheme, possible implementation at JLab12, technical challenges (polarized electron source, target, collection system, emittance filter)

4. Accelerator operation and challenges (Joe/Mike)

5. LOI-1 : TPE (e+/e- cross section ratio) @ CLAS12 (Jan/Volker/Axel/John)

6. LOI-2 : TPE (polarization observables) (Axel)

7. LOI-3 : p-DVCS (D-term, gravitationnal form factors) @ CLAS12 (FX/Latifa/Volker)

8. LOI-4 : n-DVCS (Real part of E) @ CLAS12 (Silvia)

9. LOI-5 : p-DVCS (gluon contribution) @ Hall A/C (Maxime/Carlos)

10. LOI-6 : Dark matter search (Marco/Luca)

11. Conclusion (Eric/Joe)

*Timeline*

5/18 – First draft of each section

5/25 – Final draft of LOI sections

Diffusion inside the PWG, CLAS (?), Hall A/C (?), CASA (?)

5/29 – Final version of the global LOI

Cross-check, final reading, corrections

6/01 – Submission of the LOI