Proposal # **PR12-13-008A** for **PAC48** **Hall: D**

Title: Measuring the Neutral Pion Polarizability
Group proposal with E12-13-008

Contact person: Elton Smith (JLab)

Beam time:

Beam days requested:	25
Detector commissioning time included in request:	5

E12-13-008A will use the same conditions as E12-13-008. The conditions have been slightly modified with respect to the original E12-13-008 proposal, because of the experience of GlueX data taking. The radiator thickness will be 2.5 time thicker and the beam current 2.5 time lower. The 5mm collimator will be used. A 5%RL Pb(208) will be used instead of 5%RL Sn(116)

Base Equipment

Beam parameters:

Energy:	11.6 GeV	yes
Current:	0.02 μA	yes
Polarization:	0 %	yes
Emittance:	10 mm μr	yes
Radiator:	50μm diamond	yes
Collimator:	5.0 mm diameter	yes

Targets:

Nuclei:	Pb(208) 5%RL	no

Spectrometers:

Hall D	standard	yes

Comments:

No special requirements or new equipment are needed beyond the requirements for E12-13-008.