Abstract Submitted for the HAW14 Meeting of The American Physical Society

Sorting Category: 9. (E)

Baryon Antibaryon Photoproduction using CLAS at Jefferson Lab WILLIAM PHELPS, Florida International University, CLAS COLLABORATION — There is little known about the baryon antibaryon production mechanism. The following reactions were looked at, $\gamma p \rightarrow pp\bar{p}$, $\gamma p \rightarrow pp\pi^-\bar{n}$, and $\gamma p \rightarrow p\bar{p}\pi^+n$. For these reactions the photon energies that were selected were from 4.4-5.45 GeV. The data were from the g12 experiment taken with the CLAS detector using a liquid hydrogen target at Thomas Jefferson National Accelerator Facility. This experiment had high statistics, with a luminosity of 68 pb⁻¹. General features of the data, preliminary normalized yields, and preliminary partial wave analysis results for the $p\bar{p}$ system will be shown. In addition, a first observation of antineutrons in photoproduction in the missing mass spectra of $\gamma p \rightarrow pp\pi^-\bar{n}$ will also be shown.

Abstract	Limit
	William Phelps
X Prefer Oral Session	wphelps@jlab.org
Prefer Poster Session	Florida International University
Date submitted: 01 Jul 2014	Electronic form version 1.4