

Abstract Submitted
for the DNP13 Meeting of
The American Physical Society

Development of the Low Granularity Pair Spectrometer counters in Hall D at JLab¹ NATHAN DZBENSKI, TAMARA MCNEEL, KYLE BOWMAN, Thomas Jefferson National Accelerator Facility, University of North Carolina in Wilmington — The pair spectrometer in the photon beam line of Hall D at JLab is designed to monitor the stability of photon flux and the relative tagging efficiency of the photon tagger via a well known electron-positron pair production measurement. The pair spectrometer consists of a thin foil converter, a dipole magnet, and two identical left and right arm detector packages. Each detector package covers the electron or positron energy from 3 GeV to 6.25 GeV. It consists of a front detector array for fine position resolution and rear scintillating hodoscopes to provide fast timing to form the pair production trigger. This presentation will focus on the construction and testing of the Low-Granularity Pair Spectrometer counters.

¹This project is supported by NSF grant PHY-1206043 and PHY-0855578.

Nathan Dzubenski
Thomas Jefferson National Accelerator Facility

Date submitted: 18 Jul 2013

Electronic form version 1.4