

Abstract Submitted  
for the HAW14 Meeting of  
The American Physical Society

**Testing and Calibration of the Electromagnetic Calorimeter for the Heavy Photon Search Experiment** MATHIEU EHRHART, Old Dominion University, HPS COLLABORATION — The Heavy Photon Search (HPS) experiment at Jefferson Laboratory will search for hypothetical massive vector boson, called “heavy photon.” The experiment is expected to run in Hall B in the fall of 2014. In this first phase of the measurements, it will search for a heavy photon in the mass range of 20 to 200 MeV/ $c^2$ . In this mass range the heavy photon will decay into  $e^+e^-$  pair. An electromagnetic calorimeter (Ecal) will be used to identify electrons and for triggering the readout. The Ecal is made of 442 lead-tungstate ( $\text{PbWO}_4$ ) crystals with avalanche photodiode (APD) readout. I will present results from the calibration of cosmic ray testing.

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Date submitted: 25 Jul 2014

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