## Abstract Submitted for the DNP11 Meeting of The American Physical Society

Development of Testing Equipment for Aerogel and Large-Diameter PMTs<sup>1</sup> MICHAEL METZ, Catholic University of America — The 12GeV upgrade at the Jefferson Laboratory particle accelerator allows for unique new opportunities to study hadron structure. In particular, the kaon electroproduction reaction provides new insights on the transition from the hadronic to partonic degrees of freedom. To study hadron structure through kaon production in Hall C at JLab a new detector is needed. A threshold aerogel detector that uses the emission of Cerenkov radiation to filter kaons from backgrounds of other particles is thus being built at CUA. In order to distinguish kaons from pions and protons at the desired momentum ranges of 2-4 GeV/c and 4-6 GeV/c, aerogel at indices of refraction n = 1.030 and 1.020 is required, respectively. Additionally, photomultiplier tubes are required to effectively detect the emitted radiation. In this presentation I will demonstrate the design of the new equipment I developed for testing the detector components and results from commissioning it.

<sup>1</sup>Supported in part by NSF grants PHY 1019521 and 1039446

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Date submitted: 29 Jul 2011

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