Abstract Submitted
for the APR10 Meeting of
The American Physical Society

Search for Strangeonia in Photoproduction using CLAS[1] MUKESH SAINI, Florida State University, CLAS COLLABORATION — The HyCLAS experiment at Jefferson Lab is a program to search for new and unusual mesons produced via photoproduction. The strangeonia sector is poorly known and a main component of this program is a search for new strangeonium states. The reaction $\gamma\ p \rightarrow p\ \phi\ \eta$ is an ideal channel to look for strangeonium states due to the strangeness content of both the ϕ and η. The data was acquired at the JLAB CLAS facility using a 4 - 5.5 GeV tagged photon beam. The ϕ meson is identified via the K^+K^- decay. The recoil proton is observed in the CLAS spectrometer and the η meson is identified through the missing mass. Also of interest is the search for strangeonia decaying to $\phi\pi^0$ and $\phi\omega$. These channels are OZI suppressed for $q\bar{q}$ mesons and an observation of a meson decaying to these channels would provide a strong evidence of mesons beyond $q\bar{q}$. Preliminary results describing the data quality, kinematics and dynamics will be shown.

[1]Florida State University & CLAS Collaboration, Jefferson Lab.

Mukesh Saini
Florida State University

Date submitted: 21 Oct 2009 Electronic form version 1.4