Abstract Submitted
for the DNP07 Meeting of
The American Physical Society

Current status of a partial wave analysis of the $\gamma p \to p\omega$ reaction using data from CLAS at Jefferson Lab MIKE WILLIAMS, Carnegie Mellon University, CLAS COLLABORATION — Relativistic quark models predict strong couplings to $p\omega$ —relative to $N\pi$—for some of the *missing* N^* states. Previous searches for these states in $\gamma p \to p\omega$ have relied solely on differential cross section measurements. I will present final differential cross section and ω recoil polarization measurements obtained from the CLAS g11a dataset. Measurements have been made in 112 $\sqrt{s}$ bins over the range $1.72GeV < \sqrt{s} < 2.84GeV$. The quark model predictions, along with the added constraint of the recoil polarization measurements, make ω photoproduction a perfect candidate for a partial wave analysis. Preliminary PWA results will be presented, including comparisons of published models to our recoil polarization measurements.

Mike Williams
Carnegie Mellon University

Date submitted: 14 Aug 2007 Electronic form version 1.4