

Abstract Submitted  
for the APR10 Meeting of  
The American Physical Society

**The helicity asymmetry measurements for  $\pi^0$  photoproduction with FROST at Jlab** HIDEKO IWAMOTO, The George Washington University, CLAS COLLABORATION — One of the long standing unsolved problem in the nuclear physics is the nucleon resonances  $N^*$  and  $\Delta^*$ . The lifetime of these intermediate states are very short since they decay strongly. Their parameters, mass, width, and coupling constants to various decay modes are poorly known. To solve these problems, double polarization experiments are considered to be a very effective tool since spin is a good quantum number. I will present the result of one pion photo-production from the first double polarization experiment at Jlab, comparing the prediction of theoretical models.

Hideko Iwamoto  
The George Washington University

Date submitted: 23 Oct 2009

Electronic form version 1.4