

Abstract Submitted
for the APR05 Meeting of
The American Physical Society

Beam Asymmetry Measurements from Single Pion Electroproduction KYUNGSEON JOO, MAURIZIO UNGARO, University of Connecticut, CLAS COLLABORATION — This experiment measures beam spin asymmetries in $p(\vec{e}, e'p)\pi^0$ and $p(\vec{e}, e'\pi^+)n$ in the Roper and the second resonance regions. Single pion electroproduction in the resonance region has been studied as a means of exploring the physics underlying the structure of the nucleon. Most previous measurements have focused on unpolarized cross section measurements. A new experiment using CLAS at Jefferson Lab/Hall B has measured beam spin asymmetries over a large kinematic range. The high statistical accuracy of this data set provides new and unique information on small resonant amplitudes such as Roper resonance by utilizing the interference between small resonant and large non-resonant amplitudes which are not available from unpolarized cross section measurements.

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Date submitted: 20 Jan 2005

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