Abstract Submitted
for the APR07 Meeting of
The American Physical Society

Pion Electroproduction in the Δ Excitation Region[1] YUAN XIAO, MIT, BLAST COLLABORATION — The BLAST (Bates Large Acceptance Spectrometer Toroid) collaboration recently measured the spin dependence of pion electroproduction in the Δ excitation region. The experiment used the stored, polarized electron beam of the MIT-Bates Linear Accelerator Center and an internal target of polarized hydrogen produced by an atomic beam source. The BLAST detector was used to simultaneously measure both elastic and inelastic scattering from the proton in inclusive and exclusive reactions. By reversing both the target spin and the electron beam helicity, asymmetries were constructed from the measured rates with different spin combinations. This presentation will show results for the exclusive pion electroproduction reactions ${}^1\vec{H}(\vec{e},e'\pi^+)n$ and ${}^1\vec{H}(\vec{e},e'p)\pi^0$. The asymmetries will be compared with several theoretical models.

[1]Work supported by DOE Cooperative Agreement DE-FC02-94ER40818

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Date submitted: 12 Jan 2007 Electronic form version 1.4