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Oral contribution

A new beam asymmetry measurement from pion photoproduction on the neutron using CLAS

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摘要

We present a preliminary analysis of the photon beam asymmetry observable (Σ) from the photoproduction reaction channel $\gamma n \to p\pi^-$ in the invariant mass range 1.6—2.3 GeV. The measurement was obtained using the near-4π CEBAF Large Acceptance Spectrometer (CLAS) at Jefferson Laboratory, USA, employing a linearly polarised photon beam with an energy range 1.1—2.3 GeV, incident on a liquid deuterium target. The measurement will provide new data to address the poorly established neutron excitation spectrum and will greatly expand the sparse world data-set both in energy and angle.

关键词 beam asymmetry, photonuclear, photoproduction, neutron, pion
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