

Abstract Submitted
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Pion-Nucleon Charge Exchange in the $N^*(1440)$ Resonance Region MICHAEL SADLER, SHON WATSON, Abilene Christian University, CRYSTAL BALL COLLABORATION — Results for pion-nucleon charge exchange scattering at eight laboratory momenta from 355 to 659 MeV/c will be reported from the Crystal Ball Collaboration at Brookhaven National Laboratory. The results agree well with the GWU FA02 partial wave analysis but differences exist at the backward angles at higher momenta. These data complement previously reported measurements made by the Crystal Ball Collaboration of all-neutral final states in the first and second resonance regions (charge exchange near the $\Delta(1232)$ and near eta threshold, eta production, multiple pi-zero final states, and inverse photoproduction). An overview of these data will be presented and arguments for reevaluating the accepted resonance parameters for the $N^*(1440)$ will be made.

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