Abstract Submitted
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Pion-Nucleon Single Charge Exchange at T_{π^-} = 10.6, 20.6, and 39.4 MeV[1] DONALD ISENHOWER, Abilene Christian University — Measurements will be presented for the differential cross sections for $\pi^- p \rightarrow \pi^o n$ near $0^o, 90^o$, and 180^o at T_{π^-} = 10.6, 20.6, and 39.4 MeV (P_{π^-} = 55.4, 78.6, and 112.0 MeV/c) from LAMPF Experiment 882. These data include the lowest energies ever measured for this interaction and are the only low-energy data to cover the entire angular region from 0^o to 180^o. The results are compared with the partial wave analyses and potential models. The goal of determination of the differential cross sections to better than 10% has been obtained by these measurements.

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Donald Isenhower
Abilene Christian University

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