

Abstract Submitted
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Measurement of the Cross Section and Analyzing Powers for $\vec{d}+p$ Elastic Scattering at 180 MeV¹ C.D. BAILEY, E.J. STEPHENSON, A.D. BACHER, IUCF, A.M. MICHERDZINSKA, U. Winnipeg, J.G. MESSCHENDORP, A. BIEGUN, M. ESLAMI-KALANTARI, L. JOULAEIZADEH, N. KALANTAR-NAYESTANAKI, H. MARDANPOUR, H. MOEINI, A. RAMAZANI-MOGHADDAM-ARANI, S.V. SHENDE, H. WÖRTCHE, KVI, E. STEPHAN, U. Silesia, ST. KISTRYN, Jagiellonian U., K. SEKIGUCHI, RIKEN — We have measured cross sections and analyzing powers for various $\vec{d}+d$ reaction channels, including $\vec{d}+d$ elastic and $\vec{d}+d\rightarrow p+t$ at 130 MeV and 180 MeV, with the hope of providing a testing ground for new 4-body theoretical predictions. These data were collected at the KVI cyclotron (Groningen) using the Big Bite spectrometer and a polarized deuteron beam. In addition to the $\vec{d}+d$ channels, we also measured the cross section and analyzing powers (A_y and A_{yy}) for $\vec{d}+p$ elastic scattering at the same energies for comparison with existing data and with 3-body calculations (with and without three nucleon forces). We report here our results for the $\vec{d}+p$ elastic data at 180 MeV. The analysis procedure will be reviewed and several preliminary results will be shown.

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