

Abstract Submitted
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Configuration space Faddeev equations within the general formalism for studying Nd breakup scattering¹ VLADIMIR SUSLOV, North Carolina Central University, MIKHAIL BRAUN, St. Petersburg State University, Russia, IGOR FILIKHIN, BRANISLAV VLAHOVIC, North Carolina Central University, IVO SLAUS, Rudjer Boskovich Institute, Croatia — Appropriate modifications of the configuration space Faddeev equations have been made to study the three-nucleon system assuming the neutrons and protons to be distinguishable. Breakup amplitudes for n-d and p-d scattering at $E_{lab}=14.1$ MeV are calculated in s-wave approach with the Malfliet-Tjon MT I-III and AV14 potentials. Results obtained for Nd breakup scattering in quartet and doublet spin states are compared with our predictions [1] and those of the Los-Alamos/Iowa group [2].

[1] V.M. Suslov and B. Vlahovic, Phys. Rev. C69, 044003 (2004)

[2] J.L. Friar, G.L. Payne, W. Glöckle, D. Hüber, and H. Witala, Phys Rev. C51, 2356 (1995)

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