

Abstract for an Invited Paper
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Few-body Studies at TUNL/HIGS¹

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An overview of experiments designed to understand the dynamics of few-body nuclear systems ($A=2-4$) at the Triangle Universities Nuclear Laboratory (TUNL) and the High Intensity γ -Ray Source (HI γ S) will be presented. A review of global experimental data and key advances in theory will be discussed. The talk will focus on the work at HI γ S on photodisintegration of the deuteron and ^3He with polarized gamma-rays and measurements of angular distributions of cross sections and analyzing powers as well as total cross sections. Plans for measurements of cross sections of the photodisintegration of ^4He will be presented. In addition, a brief description of few-body experiments at TUNL will be given, outlining nucleon-deuteron and nucleon- ^3He scattering experiments. The impact of these measurements on potential-model and effective field theory calculations of 2-, 3-, and 4-body systems will be presented.

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