

Abstract Submitted
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Neutron-Proton Bremsstrahlung Compared to Experiment at 225 MeV VIRGINIA BROWN, MIT and University of MD/College Park, JEROLD FRANKLIN, Temple University, PERRY ANTHONY, SLAC/Stanford — Neutron-proton bremsstrahlung ($np\gamma$) with out-of-plane contributions, relativistic spin effects, charge form-factor contributions, and meson-exchange effects included to order K in the photon momentum [1] are calculated with various modern nucleon-nucleon potentials to compare to experimental results at 225 MeV obtained by J. Matthews et al.[2] at LANCE. The data include various coplanar nucleon exit angles. These are the first experimental ($np\gamma$) data to explicitly measure the photon angular distribution. Finite-size detector effects are determined with the out-of-plane calculations.

[1] V. R. Brown and J. Franklin, Phys. Rev. C **8**, 1706 (1973).

[2] J. Matthews and T. Akdogan, private communication.

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