## Abstract Submitted for the DNP12 Meeting of The American Physical Society

An Approximate Method for Calculation of Coulomb Distortion in Electron Scattering by use of Partial Wave Expansions DAN KOSIK, Butler University — I will present a new approach to calculations of electron scattering reactions that include Coulomb Distortion by numerically solving for the relativistic radial wave functions for a simple nuclear charge distribution and setting the normalization and phase by comparison to Bessel functions in a plane wave expansion outside of the nucleus. Calculations for a surface nuclear transition density will be discussed and its implications for calculations of cross sections for inelastic scattering around 400 MeV that include Coulomb Distortion.

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