

Abstract Submitted  
for the APR15 Meeting of  
The American Physical Society

**Charge Radius Measurements of Some Light Nuclei** AL AMIN KABIR, Kent State Univ - Kent, JLAB HALL A COLLABORATION — The ability of variational Monte Carlo models to calculate the properties of light nuclei has inspired a new generation of elastic scattering measurements. Hall A at Jefferson Lab has now determined the differential cross-section for several light nuclei (H, D,  ${}^6\text{Li}$ ,  ${}^{10}\text{B}$ ,  ${}^{12}\text{C}$ ) using beam energies down to 360 MeV beam and spectrometer angles down to  $12.5^\circ$ . The results have been parametrized using a model independent Fourier-Bessel parametrization. For those nuclei where world data exists, we found good agreement. For the boron data, we made use of the NIKHEF suggestion to use  $B_4C$  instead of the problematic pure boron. After subtracting the carbon yield from the  $B_4C$  data, we obtain the boron cross section from  $0.39\text{fm}^{-1}$  to  $2\text{fm}^{-1}$  and we will present our preliminary charge radius result for this nucleus.

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Date submitted: 06 Jan 2015

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