

APR08-2008-000450

Abstract for an Invited Paper
for the APR08 Meeting of
the American Physical Society

New Results from BLAST at MIT-Bates¹

CHRISTOPHER CRAWFORD, University of Kentucky

The BLAST experiment was designed to study in a systematic manner the spin-dependent electromagnetic interaction on few-body nuclei. Utilizing the polarized electron beam in the MIT-Bates South Hall Storage Ring, highly-polarized isotopically pure targets of hydrogen and deuterium, and the symmetric toroidal BLAST detector; precise measurements have been made which permit the extraction of the proton and neutron electric and magnetic form factors. The neutron electric form factor especially is now known to a precision comparable to that of the other nucleon form factors. In this talk, I will present these measurements, as well as their transform into spatial coordinates.

¹This work is supported in part by the U.S. Department of Energy and the National Science Foundation.