

Abstract Submitted  
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**The BigBite Drift Chambers for the Measurement of  $G_E^n$  at High  $Q^2$  in Hall A** BRANDON CRAVER, University of Virginia, E02-013 COLLABORATION, HALL A COLLABORATION — A precision measurement of the electric form factor of the neutron  $G_E^n$  has been carried out in Jefferson Lab's Hall A for  $Q^2$  values of 1.2 to 3.5 GeV<sup>2</sup> using a highly polarized <sup>3</sup>He target and the quasi-elastic semi-exclusive  ${}^3\vec{H}e(\vec{e}, e'n)$  reaction. The experiment detected the ejected neutron with an array of scintillators and the scattered electron with the newly commissioned BigBite spectrometer. This new spectrometer has a large angular acceptance (80 msr), complementing the existing 6 msr high-resolution spectrometers, and will enable a new generation of low-rate experiments with lower resolution requirements. A package of three multi-wire drift chambers was constructed in order to allow the spectrometer to operate under high rate conditions and achieve a spatial resolution of  $\sigma \sim 200 \mu\text{m}$ . Novel construction techniques used for the drift chambers will be discussed. Online results showing chamber performance at raw hit rates up to 20 MHz per plane will be presented.

Brandon Craver  
University of Virginia

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