

Abstract Submitted
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Testing and Analyzing the BONuS12 RTPC at Jefferson Lab
RAEMAAD WRIGHT, Virginia Union University — The BONuS12 (Barely Off-shell Neutron Structure) group intends to measure the fundamental structure of the neutron in the valence quark region. In order to accomplish this, electron beam would scatter off a deuteron target. To ensure scattering is off the neutron, slow, backward moving spectator protons would be tagged with a Radial Time Projection Chamber (RTPC). A gas panel has been built to distribute and control gas flow through the RTPC as well as a Drift Monitoring System (DMS). An RTPC is currently being tested using Helium-Carbon Dioxide (HeCO_2) and is under high voltage, with cosmics and a radiologically controlled source (Sr-90) to see if a signal was generated on the oscilloscope. Once signals begin to show we will start to take data from the Data Acquisition System. This presentation will focus on the progress and results of this testing.

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