

# The neutron structure function $F_2$ at high- $x$ with BONuS at CLAS

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The Barely Off-Shell Nucleon Structure (BONuS) experiment at CLAS will measure the neutron structure function  $F_2$  for  $0.1 < x < 0.8$  over a broad  $Q^2$  range, from 1 to 14 GeV<sup>2</sup>/ $c$ , using electron scattering from deuterium with spectator-proton tagging. By selecting the low-momentum recoil protons at large backward angles, final-state interactions as the deuteron breaks up can be minimized, and the deep-inelastic kinematics for the neutron can be determined. This technique, which has been used successfully at CLAS at 6 GeV, will be extended to 11 GeV beam energy with significantly increased luminosity. Details of the BONuS third generation Radial Time Projection Chamber and expected high- $x$   $F_2^n$  results will be presented.