

Abstract Submitted  
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**The First Results From CLAS12 on Inclusive Electron Scattering**

NIKOLAY MARKOV, Jefferson Lab — Studies of inclusive electron scattering offer an effective tool for the exploration of the structure of the nucleon. The first results on inclusive electron scattering with CLAS12 at invariant masses of the final state hadrons  $W < 2.5$  GeV and photon virtualities  $1.0 \text{ GeV}^2 < Q^2 < 9.0 \text{ GeV}^2$  will be presented. Owing to the almost  $4\pi$  acceptance of the CLAS12 detector, data have been collected within the broad  $W$ -range, from the meson electroproduction threshold up to 2.5 GeV, for any given bin of  $Q^2$ . This feature is of particular importance for the studies of the inclusive  $p(e,e')X$  process in the nucleon resonance region, where the resonance peaks make the data interpolation problematic over the finite bins of  $W$  and  $Q^2$ . The CLAS results on the  $N^*$  electrocouplings of most resonances with masses  $< 1.8$  GeV allow us to evaluate the resonant contributions in the inclusive  $p(e,e')X$  process and thus gain insight into the nucleon parton distribution function (PDF) at large  $x$ -Bjorken. This  $p(e,e')X$  data will also serve as a tool to understand the CLAS12 performance and as a benchmark for the studies of exclusive channels with the CLAS12 detector.

Nikolay Markov  
Jefferson Lab

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