

Abstract for an Invited Paper  
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**Nucleon Transition Form Factors with CLAS12<sup>1</sup>**

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The measurements of exclusive single-meson and double-pion electroproduction cross sections off the proton to study nucleon resonances will be extended to higher momentum transfers with the CLAS12 detector and the energy upgraded CEBAF beam at JLab. Based on new theoretical developments to extract and interpret the electromagnetic transition form factors and on the experience gained from the most recent results, the newly formed collaboration of experimentalists and theorists shall enable us to provide unprecedented high-precision data, high-quality analyses, and state of the art model and QCD based calculations in a  $Q^2$  domain up to  $10 \text{ GeV}^2$ . For the first time nucleon resonance structures will be studied at still unexplored distance scales, where the dressed quark contributions are the dominating degrees of freedom, and where their strong interaction is responsible for the ground and excited nucleon state formations. These studies will provide promising opportunities to understand the origin of more than 98% of the nucleon mass that is created by strong fields predominantly at the distance scales accessible with CLAS12.

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