

Abstract Submitted
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Exclusive π° and η electro-production at high Q^2 in the resonance region MARK JONES, Jefferson Lab — At Jefferson Lab in Hall C, measurements of exclusive $p(e, e'p)X$ with $X = \pi^\circ, \eta$ cross sections were performed for a beam energy of 5.5 GeV. Electrons were detected in the Short Orbit Spectrometer (SOS) at angles of 47.5° and 70° with a range of invariant mass, W , between meson threshold and 1.8 GeV. The outgoing protons were detected at a range of angles and momentum so that all center of mass angles were covered for most of the W range. The $p(e, e'p)\pi^\circ$ data was centered at $Q^2 = 6.4$ and 7.7 GeV² and the magnetic transition form factor, G_M^* , for the $\Delta(1235)$ resonance was extracted from the cross section data. The $p(e, e'p)\eta$ data is dominated by the $S_{11}(1535)$ resonance and the helicity conserving transition amplitude, $A_{1/2}$, for the S_{11} was extracted at $Q^2 = 5.7$ and 7.0 GeV². These results are at the highest Q^2 ever measured and will be discussed in the context of current theoretical models.

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