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**Isobar configurations in the $^3$He ground state** RAKHSHA NASSERIPOUR, George Washington Unversity, CLAS COLLABORATION — The probabilities of short-range correlations (SRC), meson-exchange currents and final-state interactions in nuclei contribute to the measured observables that are mostly being interpreted within strongly model-dependent pictures. Studying the short-distance structure and virtual nucleon excitations, especially isobar configurations in the nuclear ground state, are important subjects in experimental nuclear physics. Since the SRC are local high-density regions, it is likely that the quark distributions of nucleons would make a transition to non-nucleonic configurations. A number of theoretical calculations predict the probability of finding one or more nucleons in an excited state. In some studies, isobar excitations have been explicitly included in the few-body models. In this work we have explored a recent data set of photon-induced reactions from nuclear targets to study various photoproduction channels that contain one or more $\Delta$-isobar configurations, for example, the $\gamma^3\mathrm{He} \rightarrow \Delta^{++}nn$ or $\gamma^3\mathrm{He} \rightarrow \Delta^{++}\Delta^0 n$ reactions. Data were taken with CLAS in Hall B at Jefferson Laboratory using an incident photon-beam energy of 0.5-1.5 GeV on a $^3$He target. Preliminary results and future plans will be discussed.

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