

The prospect for studying $n\pi^+\pi^0$ electroproduction off protons

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Investigation of double pion electroproduction channel is a very efficient tool for the study of nucleon resonances.

Many experiments have already provided a lot of data on the cross sections of the reaction $\gamma_v p \rightarrow p'\pi^+\pi^-$. Their subsequent interpretation within the phenomenological model delivered valuable information on nucleon resonances electrocouplings.

Another promising channel with $n\pi^+\pi^0$ final state was not yet subject to the investigation with CLAS due to the limited angular coverage of π^0 detection. The cross section of this so far unexplored channel benefits from larger relative resonant contribution comparing to the reaction with $p\pi^+\pi^-$ final state.

The study of a new channel requires an adaptation of the experimental analysis tools and the phenomenological reaction model which were previously established for $\gamma_v p \rightarrow p'\pi^+\pi^-$ channel. The status of this activity will be presented in the talk.

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