Phenomenological studies of CLAS data on double charge pion electroproduction\textsuperscript{1} VICTOR MOKEEV, VOLKER BURKERT, Jefferson Lab, CLAS COLLABORATION — Comprehensive studies of unpolarized $\pi^-\pi^+p$ electroproduction cross-sections, for the first time available from CLAS \cite{Fedotov, Ripani}, were carried out within the framework of phenomenological approach \cite{Mokeev}. Analysis of these data allowed us to establish all important mechanisms, contributing to this exclusive channel in $N^*$ excitation region at photon virtualities from 0.2 to 1.5 GeV\textsuperscript{2}. Electrocouplings for $P_{11}(1440)$, $D_{13}(1520)$ states at $Q^2 < 0.6\text{GeV}^2$ were obtained from the analysis of CLAS data \cite{Fedotov}. The contributions from various mechanisms in terms of both amplitudes and single differential cross-sections were determined from the data fit. This information is of particular interest for $N^*$ studies in coupled channel approaches under development at EBAC \cite{Matsuyama}. 

\textsuperscript{1}supported in part by US DOE

\textsuperscript{1}G.V.Fedotov, et. al., Bull. of Russian Academy of Science,71,328 (2007).
\textsuperscript{3}V.I.Mokeev, et. al., Int. Workshop on the Physics of Excited Baryons (NSTAR05) Tallahassee, Florida, 10-15 Oct 2005, ed by V.Crede, P.Eugenio and S.Capstick, p.47.

Victor Mokeev  
Jefferson Lab  

Date submitted: 02 Jul 2007  
Electronic form version 1.4