

Abstract Submitted
for the DNP13 Meeting of
The American Physical Society

Studies of $\pi^+\pi^-p$ electroproduction at W from 1.4 to 1.8 GeV and Q^2 from 0.4 to 1.1 GeV² with CLAS GLEB FEDOTOV, RALF GOTHE, University of South Carolina, VICTOR MOKEEV, Jefferson Lab, CLAS COLLABORATION — High precision data for the reaction $ep \rightarrow e'p'\pi^+\pi^-$ have been taken with the CLAS detector at Jefferson Lab covering the kinematic range in the hadronic invariant mass region $1.45 \text{ GeV} < W < 1.8 \text{ GeV}$ and for photon virtualities $0.4 \text{ GeV}^2 < Q^2 < 1.1 \text{ GeV}^2$. Nine single-differential cross sections, composed of the angular distribution of all hadrons, the angular distributions given by all combinations of hadron pairs, and the invariant masses of all hadron pairs in the final state, have been measured. The data have been subjected to a phenomenological analysis using the reaction model [1,2], and the electrocouplings of several nucleon resonances in the mass range up to 1.8 GeV have been extracted. The data analysis and preliminary results of the resonance analysis study will be discussed. The kinematic coverage of earlier experiments [3,4] was extended. Special attention will be paid to the previously seen candidate state with $J^P = 3/2^+$ at a mass of 1720 MeV.

[1] Mokeev, V.I. and others, Phys.Rev. C86 035203.

[2] Mokeev V. I. and others, Phys.Rev. C80 045212.

[3] Fedotov G.V. and others, Phys.Rev. C79 015204.

[4] Ripani, M. and others, Phys.Rev.Lett. 91 022002.

Gleb Fedotov
University of South Carolina

Date submitted: 29 Jun 2013

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