

Deep Processes Working Group Report

CLAS Collaboration Meeting
Jefferson Lab, October 5th 2017

Publications:

CLAS 2016-10

Determination of the proton spin structure functions for $0.05 < Q^2 < 5.0 \text{ GeV}^2$ using CLAS

R. Fersch, submitted to Phys Rev C

CLAS 2017-06

Semi-inclusive π^0 target and beam-target asymmetries from 6 GeV electron scattering with CLAS

S. Jawalker, submitted to Phys. Lett. B

CLAS 2017-09

Measurement of Unpolarized Cross Sections and Polarized Cross Section Differences for Deeply Virtual Compton Scattering (DVCS) on the proton at the Jefferson Laboratory with CLAS, at $0.1 < x_B < 0.58$, $1.0 < Q^2 < 4.8 \text{ GeV}^2$, and $0.09 < -t < 2.0 \text{ GeV}^2$,

H. Saylor, submitted to Phys. Rev. C

Ad Hoc Review

Analysis	Data	Lead Author	In progress
Beam spin asymmetries of $ep \rightarrow ep\eta$ in the deep inelastic regime	e1f	A. Kim	Done Sep 17
Measurement of the spin structure g_1^d of the deuteron and its moments at low Q^2	eg4	K. Adihari	Done Sep 17
Hard exclusive backward-angled single charged pion electronproduction from the proton at CLAS	e16	K. Park	2 nd round in September

Analysis Review

Analysis	Data	Author	In progress
Beam asymmetries in exclusive π^+ electro production for $W > 1.7$ GeV from e16	e16	P. Bosted	Ongoing
Exploring the structure of the proton via semi-inclusive pion electroproduction	e1f	N. Harrison K. Joo	Ongoing

Analysis Review

Analysis	Data	Author	In progress
Exclusive electroproduction of the $f_0(980)$ and $f_2(1270)$ on the proton with CLAS	e1f	B. Garillon S. Niccolai	Brice busy with other project, V2 in one month
Di-hadron beam spin asymmetry in SIDIS electro production	eg1-dvcs	S. Pisano	Silvia busy with other project Last version in one month
Deep-virtual production of the ρ^+ meson off the proton	e1-dvcs	A. Fradi	Ahmed busy with other projects. Slow progress
Semi-inclusive pion production	e16	M. Osipenko	Working on a better alignment
Time-like Compton scattering	g12	I. Abayrak	Last record 2015

DPWG Meeting, 5th October 2017

Future plans and opportunities (morning)

CLAS6 Analysis (afternoon)

Studies and developments for CLAS12 (afternoon)

Common WG session (11:00 – 12:30):

- a possible analysis framework common to the whole Collaboration
- the role of the WGs in CLAS12 to help
strengthening the analysis quality and shortening the review time