

# Deep Processes Working Group Report

CLAS Collaboration Meeting  
Jefferson Lab, 14<sup>th</sup> November 2019

# Ad Hoc Reviews

Analysis	Data	Lead Author	In progress
Extraction of $A_{LU}^{\sin\phi}$ moments from hard exclusive $\pi^+$ off the unpolarized hydrogen target in a wide range of kinematics	e1f	S. Diehl	1 <sup>nd</sup> round done on Aug 19
Exploring the structure of the proton via semi-inclusive pion electro-production	e1f	N. Harrison K. Joo	2 <sup>nd</sup> round done on Jan 19

# Analysis Reviews

Analysis	Data	Author	In progress
First Observations of Beam Spin Asymmetries for K+	e1f	D. Riser	2 <sup>nd</sup> round done on Jul 18
Measurement of the spin structure g <sub>1p</sub> of the proton and its momentum at low Q <sup>2</sup>	eg4	X. Zheng	2 <sup>nd</sup> round done on Nov 5
24Di-hadron beam spin asymmetry in SIDIS electro production	eg1-dvcs	M. Mirazita	Analysis under revision
Beam asymmetries in exclusive $\pi^+$ electro production for $W > 1.7$ GeV from e16	e16	P. Bosted K. Park	Extended scope
Semi-inclusive pion production	e16	M. Osipenko	Working on a better alignment

# Analysis Reviews

Analysis	Data	Author	In progress
Deep-virtual production of the $\rho^+$ meson off the proton	<b>e1-dvcs</b>	<b>A. Fradi</b>	Ahmed willing to continue
Exclusive electro-production of the $f_0(980)$ and $f_2(1270)$ on the proton with CLAS	<b>e1f</b>	<b>B. Garillon S. Niccolai</b>	Brice busy with other project
Time-like Compton scattering	<b>g12</b>	<b>I. Abayrak</b>	Last record 2015

# CAA Reviews

Analysis	Data	Author	In progress
Observation of transverse polarization of Lambda hyperons in the current fragmentation from unpolarized targets	<b>RGA</b>	<b>A. Vossen C. Dilks</b>	<b>2<sup>nd</sup> round done on Sep 19</b>
Boer-Mulders effect and helicity dependent fragmentation functions in hadron pair production off unpolarized targets	<b>RGA</b>	<b>A. Vossen C. Dilks</b>	1 <sup>st</sup> round done on Oct 18

# DNP 2019

- T. Hayward Charged di-hadron beam-spin asymmetries from CLAS12  
S. Diehl SIDIS Single Pion Beam Spin Asymmetry Measurements with CLAS12  
C. Dilks Dihadron Beam Spin Assymetries and Helicity-Dependent Fragmentation in SIDIS at CLAS12  
H. Avakian Hadronization of quarks and correlated di-hadron production in DIS
- G. Christiaens Proton Deeply Virtual Compton Scattering at 10.6 GeV with CLAS12 at Jefferson Lab  
A. Kim Deeply Virtual Exclusive  $\pi^0$  Electro-production Measurements with CLAS12 at Jefferson Lab  
B. Clary Exclusive Phi Meson Electro-production for CLAS12  
J. Artem Tan Deeply Virtual Compton Scattering with CLAS12 at Multi-Energy Polarized Electron Beam
- A. Biselli Coherent Deuteron Deeply Virtual Compton Scattering with CLAS12  
K. Price Deeply Virtual Compton Scattering on the Neutron
- C. Fogler Investigating the Origin of the EMC Effect
- S. Diehl TDA Measurements based on hard exclusive pion electroproduction with CLAS at JLAB  
M. Hattaway 3D Partonic Structure of Nucleon and Light Nuclei  
D. Payette Tracking Low-momentum Protons in a Radial Time Projection Chamber

# CLAS Speakers Committee

## What do we do?

Our main role is to supervise and promote an accurate and broad dissemination of results to the scientific community by talks from members of the CLAS Collaboration.

## What do **you** need to do?

- All **Invited** talks need to be **Approved** by the CSC committee
- CLAS Members need to **Notify** CSC for **Contributed** talks, for **Invited seminars**, or **Posters**
- For **General** talks in which 50% of the slides or less are CLAS related members need to **Notify** CSC
- All **Proceedings** need to be submitted to CSC for review and approval at least 1 week before the submission deadline

**The notification and approval requests are done using the [SHIFTBOT](#) Interface**

**For any issues or clarifications you can contact CSC directly: [csc@jlab.org](mailto:csc@jlab.org)**

**More information can be found on our [wiki page](#)**

# DPWG Meeting, 14<sup>th</sup> November 2019

DPWG session (8:30 – 12:30):

Hard Exclusive observables

Reconstruction and Analysis Tools

SIDIS observables

Common WG session (14:30 – 18:00):

Selected topics

Common analysis studies and tools