CLAS Collaboration Meeting, July 2026

Deep Processes Working Group

Maria Żurek, zurek@anl.gov
Argonne National Laboratory

Deep Processes Working Group

Useful Information

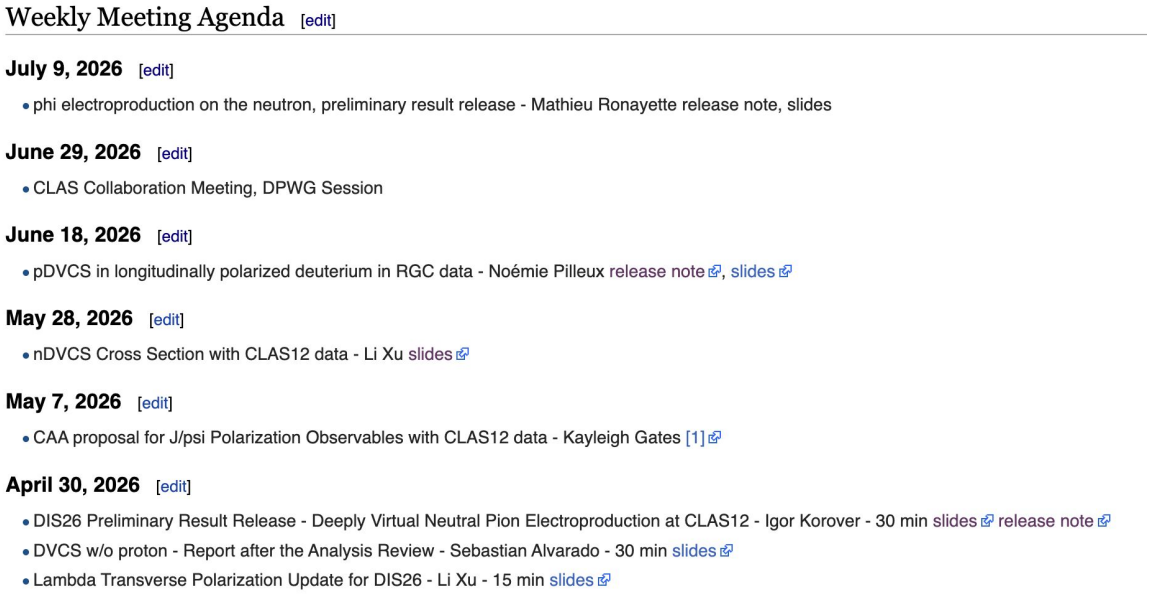
Mailing List

You can sign up here: **https://mailman.jlab.org/mailman/listinfo/deeppwg**

Meetings

Thursdays, 8:30 AM (aimed biweekly, but generally organized as needed)

- Zoom Meeting ID: 161 807 0446
- Passcode: Sent in the email to DPWG



Weekly Meeting Agenda [edit]

July 9, 2026 [edit]

- phi electroproduction on the neutron, preliminary result release - Mathieu Ronayette release note, slides

June 29, 2026 [edit]

- CLAS Collaboration Meeting, DPWG Session

June 18, 2026 [edit]

- pDVCS in longitudinally polarized deuterium in RGC data - Noémie Pilleux release note, slides

May 28, 2026 [edit]

- nDVCS Cross Section with CLAS12 data - Li Xu slides

May 7, 2026 [edit]

- CAA proposal for J/psi Polarization Observables with CLAS12 data - Kayleigh Gates [1]

April 30, 2026 [edit]

- DIS26 Preliminary Result Release - Deeply Virtual Neutral Pion Electroproduction at CLAS12 - Igor Korover - 30 min slides release note
- DVCS w/o proton - Report after the Analysis Review - Sebastian Alvarado - 30 min slides
- Lambda Transverse Polarization Update for DIS26 - Li Xu - 15 min slides

Deep Processes Working Group

Useful Information

Wiki https://clasweb.jlab.org/Hall-B/dpwg/index.php/Main_Page

Main Page

Meetings · Preliminary Results

Overview

Welcome to the CLAS12 Deep Processes Working Group (DPWG).

This wiki is a working space for sharing analysis plans, meeting materials, tools, and documentation across the DPWG community.

How to contribute

- All DPWG members are encouraged to propose additions or updates to this wiki.
- You can edit pages after logging in with your JLab CUE credentials.
- If you prefer, send suggestions or content to the [chair] and we will post it for you.

If you are new to the group, start by browsing the sections in the top menu. Thank you for helping keep this space current and useful to everyone.

New Preliminary Results

Preliminary Results

Back to the Main page

This page serves as an archive for tracking preliminary releases for the DPWG.

- If the results reached the publication stage, **please use the published plots**.
- When using released preliminary plots in your presentation, **please credit** the release author and the CLAS Collaboration.

Topic	Authors	Institution	Data	Release Date	Conference	Presentation	Note	Plots	Publication
pDVCS in longitudinally polarized deuterium in RGC data	Noémie Pilleux	Argonne National Laboratory	RGC	18 June 2026	QCHS26	slides	note	plots	
Deeply Virtual Neutral Pion Electroproduction at CLAS12	Igor Korover	Tel Aviv University	RGA	30 Apr 2026	DIS26	slides	note	plots	
pi+pi- dihadron asymmetries results from RGC data	Nilanga Wickramaarachchi	Duke	RGC	23 Apr 2026	DIS26	slides	note	plots	
Beam-spin asymmetry extraction of Sullivan DVCS with RGA data	Elouan Ferrand	CEA Saclay	RGA	23 Apr 2026	DIS26	slides	note	plots	
Beam-spin asymmetry extraction of Sullivan DVCS with RGA data	Elouan Ferrand	CEA Saclay	RGA	15 Oct 2025	EINN2025	here	here	here	
Measurements of the Cosphi and Cos2phi Moments of the Unpolarized SIDIS pi+ Cross-section at CLAS12	Richard Capobianco	UCONN/ANL	RGA	07 Oct 2025	DNP2025	here	here	here	
Measurement of the pi0 multiplicities in SIDIS at CLAS12	Valerii Klimenko	Argonne	RGA	03 Oct 2025	DNP2025	here	here	here	
Measurement of DVCS cross section on the neutron at the CLAS12 experiment	Li Xu	IPN-Orsay	RGB	11 Sep 2025	EuNPC2025	here	here	here	

Published

Since Last Collaboration Meeting

1. P. Chatagnon *et al. (CLAS Collaboration)*,"Measurement of the Near-Threshold J/ψ Photoproduction Cross Section with the CLAS12 Experiment", Phys. Rev. C. 113, 065203 (2026). (paper)
2. M. McEneaney *et al. (CLAS Collaboration)*, "Longitudinal Spin Transfer to Λ Hyperons in Semi-Inclusive Deep Inelastic Scattering with the CLAS12 Spectrometer", Phys. Rev. C 113, 092019 (2026). (paper)

Ad-Hoc

'Measurement of the p(e,e′γ)p absolute cross section at 10.6 GeV beyond Bethe-Heitler over a large phase space' (Sangbaek Lee)

Approved as of few yesterday

'A multidimensional study of SIDIS π^- and π^0 beam spin asymmetry over a wide range of kinematics' (Stefan Diehl)

Working on new-ad hoc for π^0 analysis only

New:

‘First Measurement of Near-Threshold J/ψ Photoproduction on the Neutron’ (Tyson) **-** ***just started***

High precision measurements of Deeply Virtual Compton Scattering at small nucleon momentum transfer' (Alvarado) **-** ***1st round of comments***

Soon?:

'Measurements of Deeply Virtual Exclusive ρ0 Production with CLAS12' (Kim)

In Analysis Review

Measurement of Deeply Virtual Compton Scattering Cross-Section on the Neutron at the CLAS12 Experiment (Review #4075568, Li Xu)

- ***New since last CM***

  - Strengthen data-MC agreement and validation for detector performance
  - Expand validation of the cross-section extraction, including closure tests
  - Finalize radiative corrections and quantify remaining backgrounds and detector effects

"Extraction of spin-asymmetries in the production of π^+ with a longitudinally polarized beam/target at CLAS12" (Review #7091961, Timothy Hayward)

- ***New since last CM***

  - 1st round comments responded: clarifying the analysis workflow, expanding PID and MC validation, radiative correction studies, and strengthening the evaluation and presentation of systematic uncertainties.

In Analysis Review

"Measurement of the Deeply Virtual π^0 Electroproduction Cross Section off the Proton at 10.6 GeV using CLAS12" (Review #1334997, Igor Korover)

- ***1st round of comments***

- Strengthen the validation of the absolute cross-section extraction, including realistic MC validation, acceptance, radiative and bin-center corrections, and treatment of bin migration on a bin-by-bin basis.
- Provide a quantitative determination of the global normalization, replacing the current empirical 1.3 scale factor with a data-driven evaluation of detector efficiencies and normalization uncertainties.

In Analysis Review

"BONuS12 Neutron DIS Analysis" (Review #5563554, Hattawy)

• First round of review comments posted; discussion at last CM, update on BONuS12 today
• Reviewers raised major concerns about RTPC efficiency determination, momentum-dependent corrections, and consistency between data and MC
• Clarifications requested on background and contamination treatment (He contamination, additional proton backgrounds) and several detector calibration/analysis assumptions

"Deeply Virtual Compton Scattering Beam Spin Asymmetry at 6.5 GeV and 7.5 GeV Polarized Electron Beam with CLAS12" (Review #3404837, Tan)

• First round of review comments sent; major revision requested
• Reviewers requested better justification of analysis choices (cuts, detector corrections, background treatment, π^0 contamination and subtraction) and improved data–MC validation
• Additional concerns raised about systematic uncertainties (especially exclusivity cuts), consistency of results, and comparison with existing data and models

In Analysis Review

Longitudinal BSA in $K^+\pi^-$, π^+K^-, and K^+K^- Dihadron Production (Pecar, Review #1043422)

- Authors submitted responses to the second round of review comments
- Main reviewer questions focused on limited outbending MC statistics and data–MC discrepancies in tracking/fiducial variables
- Clarifications requested on PID optimization procedure and definition of efficiency/contamination used in the FOM

"BAND Analysis" (Review #1844892, Kutz)

- Authors presented an update at the last collaboration meeting and are preparing a new analysis note
- Committee requested clearer comparisons between RG-B data, RG-A background subtraction, and simulation
- Additional studies requested to better understand the origin and normalization of the RG-A background

09:15 **Sullivan DVCS Update** 30m

20 min + 10 min

Speaker: Elouan Ferrand (CEA Saclay)

CollaborationMee...

09:45 **Timelike Compton Scattering channel using RG-K data, with a focus on the 8.5 GeV run period** 30m

20 min + 10 min

Speaker: Maggie Kerr (Massachusetts Institute of Technology)

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10:15 **Student Flash Talk: RGB data to extract beam-spin asymmetries for coherent DVCS on deuterium** 10m

7 min + 3 min

Speaker: Marius Bousseau

10:30 **Coffee Break (F113)** 30m

11:00 **DVCS Cross-Section Analysis with RGA** 30m

20 min + 10 min

Speaker: Timothy Hayward (MIT)

DVCS_July_collab...

11:30 **Remarks from the EMMI Rapid Reaction Task Force meeting "Impact of Vector Mesons on the Studies of the 3D Structure of the Nucleon""** 30m

20 min + 10 min

Speaker: Harut Avagyan (Jefferson Lab)

avakian-dpwg-jun...

12:00 **SIDIS pi+ azimuthal modulations with RGA: rho0 contribution** 20m

15 min + 5 min

Speaker: Richard Capobianco

14:00 → 18:00 **Day 2 Parallel: DPWG Parallel II** — F113

Convener: Maria Zurek (Argonne National Laboratory)

14:00 **SIDIS pi0 multiplicities from RGA** — 30m

20 min + 10 min

Speaker: Valerii Klimenko (Argonne National Laboratory)

14:30 **Probing Proton GPDs through Exclusive ω(782) Electroproduction with RGA Data** — 30m

20 min + 10 min

Speaker: Prof. Zhaozhong Shi (Lamar University)

15:00 **Electroproduction of Phi Vector Meson with Proton Target from 6.5–10.6 GeV Beam Energies** — 30m

20 min + 10 min

Speaker: Bhawani Singh (Jefferson Lab)

15:30 **Coffee Break (F113)** — 30m

16:00 **Longitudinal Spin Structure of the Proton in Run Group C** — 30m

20 min + 10 min

Speaker: Derek Holmberg (William and Mary)

16:30 **Exclusive pi- production with RGC** — 30m

20 min + 10 min

Speaker: Maggie Kerr (Massachusetts Institute of Technology)

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17:00 **Lambda polarization in K+Lambda electroproduction with RGC** — 20m

15 min + 5 min

Speaker: Li XU (Brookhaven National Laboratory)

17:20 **Student Flash Talk: pho0 SSAs in epX** 10m

7 min + 3 min

Speaker: Blake Williams (Duquesne University)

17:30 **Student Flash Talk: Summer Internship Project: PID with ML** 10m

7 min + 3 min

Speaker: Cooper Bell (Duquesne University | ANL (Intern))

17:40 **Student Flash Talk: Updates to the JLab Q-meter software** 10m

Speaker: Chhetra Lama (University of New Hampshire)