CLAS Collaboration Meeting, Nov 2026

Deep Processes Working Group

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Deep Processes Working Group

Useful Information

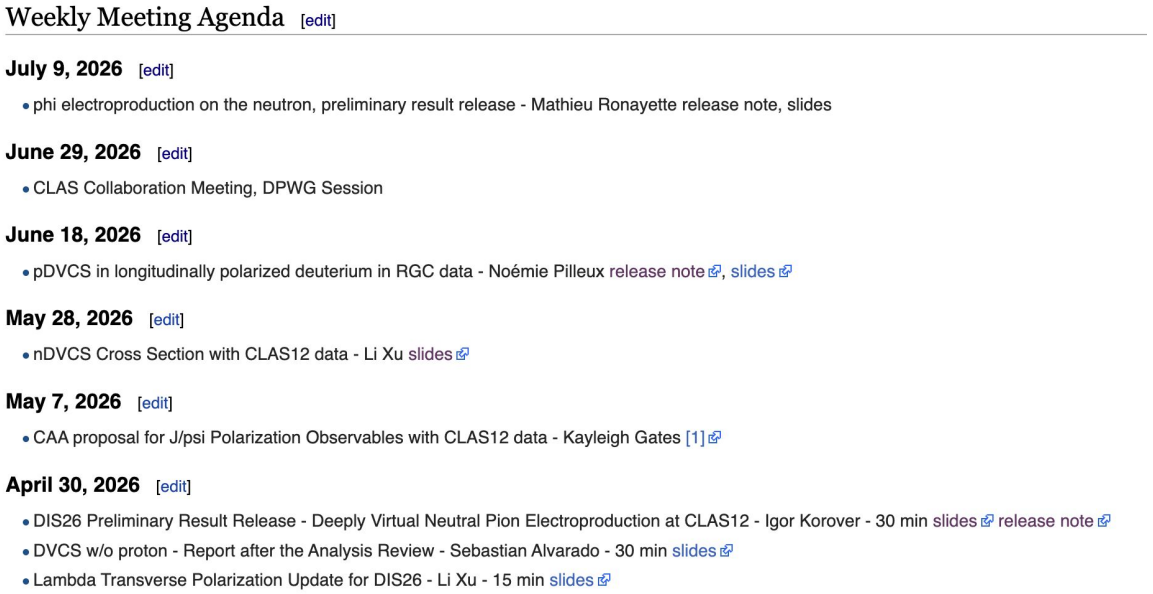
Mailing List

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

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

- Measurement of the Deeply Virtual phi-meson Production on the Proton at Beam Energies of 6.5–10.6 GeV, Bhawani Singh
- Phi electroproduction on the neutron, Mathieu Ronayette
- Measurements of the Cosphi and Cos2phi Moments of the Unpolarized SIDIS pi+ Cross-section at CLAS12, Richard Capobianco
- Measurement of the pi0 multiplicities in SIDIS at CLAS12, Valerii Klimenko

On ArXiv

Since Last Collaboration Meeting

1. R. Tyson *et al. (CLAS Collaboration)*, "First Measurement of Near-Threshold J/ψ Photoproduction on the Neutron", arXiv:2609.03579, submitted to Phys. Rev. Lett. (2026). (arXiv)
2. S. Lee *et al. (CLAS Collaboration)*, "Multi-Differential DVCS Cross-Section Measurement on the Proton in the Valence Region with CLAS12", arXiv:2608.20585, submitted to Phys. Rev. C (2026). (arXiv)

Ad-Hoc

1. High precision measurements of Deeply Virtual Compton Scattering at small nucleon momentum transfer' (Alvarado)
2. Measurements of Deeply Virtual Exclusive ρ0 Production with CLAS12 (Kim)
3. A multidimensional study of SIDIS π^- and π^0 beam spin asymmetry over a wide range of kinematics (Diehl)

In Analysis Review

"RGC pi+pi- dihadron asymmetries" (Nilanga Wickramaarachchi)

Committee Search

In Analysis Review

"Beam-spin asymmetry extraction of Sullivan DVCS with RGA data" (Review #8367734, Elouan Ferrand)

1st round of comments - 8/21/26

- Clarify mixed-sample BSA and model limitations
- Validate efficiencies, resolutions, π^0 contamination, and data-MC agreement
- Strengthen closure tests, false-asymmetry checks, and uncertainty estimates

In Analysis Review

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

1st round of comments - 6/25/26

- 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

In Analysis Review

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

3rd round of comments, 10/26/26

- Significant progress; with final analysis-note approval pending last corrections.
- Improve signal selection consistency and clarify nuclear contributions and radiative corrections.
- Address remaining comments and editorial issues, and provide a publication draft.

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 - 5/14/26

- 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, Mohammad Hattawy)

1st round of comments - February 16, 2026

• Reviewers raised 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

In Analysis Review

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

2nd round of comments - 10/18/26

- Second-round review partially completed; Volker is satisfied, Marco's comments pending
- Significant improvements, but further clarification needed on systematics, π^0 analysis, and momentum corrections
- Physics conclusions still need to be developed.

In Analysis Review

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

last round of comments finished on, analysis approved on March 5, 2026

In Analysis Review

"BAND Analysis" (Review #1844892, Kutz)

Analysis update today

• Authors presented an update at the collaboration meeting in march 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

In Analysis Review

Review #1314743: "The Unfavored to Favored Fragmentation Ratio off the Deuteron", Erez Cohen

Dormand since October 28, 2023 (1st round of comments from the committee)

CAA

Measurements of J/ψ Polarization Observables with RG-A and RG-C dataset - Kayleigh Gates - Friday 9:00 AM

'Timelike Compton Scattering off Proton using RG-K Experiment' - Maggie Kerr - in PWG review