

**3DPartons week**

# **Report of Contributions**

Contribution ID: 2

Type: **not specified**

# Welcome

*Wednesday 26 October 2022 09:15 (15 minutes)*

**Presenter:** MEZRAG, Cédric

**Session Classification:** GPDs at EIC

Contribution ID: 3

Type: **not specified**

## Exclusive processes with the ePIC detector at the Electron-Ion Collider

*Wednesday 26 October 2022 09:30 (30 minutes)*

**Presenter:** SOKHAN, Daria (CEA Saclay / Glasgow U.)

**Session Classification:** GPDs at EIC

Contribution ID: 4

Type: **not specified**

## Overview and prospects of DVCS studies for EIC

*Wednesday 26 October 2022 10:00 (30 minutes)*

**Presenter:** FAZIO, Salvatore (Universita della Calabria e INFN (IT))

**Session Classification:** GPDs at EIC

Contribution ID: 5

Type: **not specified**

## **Low and moderate x gluon contributions to DVCS, TCS and DDVCS**

*Wednesday 26 October 2022 11:00 (30 minutes)*

**Presenter:** BOUSSARIE, Renaud (CPHT, CNRS, Ecole polytechnique, IP Paris)

**Session Classification:** GPDs at EIC

Contribution ID: 6

Type: **not specified**

## EpIC: A Monte Carlo event generator for exclusive processes

*Wednesday 26 October 2022 11:30 (30 minutes)*

There has been an increasing interest in exclusive processes in recent years. Part of this interest stems from the open questions of how the spin of the proton is decomposed into its intrinsic spin and orbital motions, along with the possibility of gaining energy-momentum densities through exclusive processes. During this presentation, we will introduce the EpIC Monte Carlo event generator. By utilizing the PARTONS framework, the EpIC generator offers a flexible structure and a variety of model options which make it an attractive tool for the community. In addition, the EpIC generator incorporates first-order radiative corrections in its architecture. Therefore, EpIC offers a comprehensive set of features that will enable nucleon structure to be studied more deeply through impact studies on future electron-ion colliders.

**Presenter:** TEZGIN, Kemal**Session Classification:** GPDs at EIC

Contribution ID: 7

Type: **not specified**

## Exploring the Nucleus in 3D with GPDs

*Wednesday 26 October 2022 12:00 (30 minutes)*

**Presenter:** DUPRÉ, Raphaël (IJCLab, Univ. Paris-Saclay)

**Session Classification:** GPDs at EIC

Contribution ID: 8

Type: **not specified**

## GPDs in symmetric and asymmetric frames

*Wednesday 26 October 2022 14:00 (30 minutes)*

**Presenter:** STEFFENS, Fernanda

**Session Classification:** GPDs on the lattice



Contribution ID: 9

Type: **not specified**

## Cancelled

*Wednesday 26 October 2022 14:30 (30 minutes)*

**Presenter:** ZAFEIROPOULOS, Savvas

**Session Classification:** GPDs on the lattice

Contribution ID: **10**

Type: **not specified**

## **GPDs in UPC with Lepton pair production**

*Wednesday 26 October 2022 15:00 (30 minutes)*

**Presenter:** WAGNER, Jakub

**Session Classification:** GPDs at LHC

Contribution ID: 11

Type: **not specified**

## Aspects of the modelling of GPDs at very small Bjorken-x

*Wednesday 26 October 2022 16:00 (30 minutes)*

Heavy meson photoproduction in UPC provides a welcome indirect access to gluon PDFs in the very small  $x$  region. Technically, the cross-section involves generalised parton distributions (GPDs). A popular proposal to relate the GPDs to PDFs based on the Shuvaev transform has been used to interpret recent experimental data. I propose to discuss in detail the regime of validity of this proposal and to provide tools to quantify the level of uncertainty one can expect from such modelling.

**Presenter:** Dr DUTRIEUX, Hervé (CEA Saclay/Irfu)

**Session Classification:** GPDs at LHC

Contribution ID: 12

Type: **not specified**

## Matching GTMDs onto GPDs

*Wednesday 26 October 2022 16:30 (30 minutes)*

**Presenter:** Dr BERTONE, Valerio (C.E.A. Paris-Saclay)

**Session Classification:** GPDs at LHC

Contribution ID: 13

Type: **not specified**

## Discussion Session : GPDs at Colliders

**Session Classification:** GPDs at LHC

Contribution ID: 14

Type: **not specified**

## Kinematical higher-twist corrections in $\gamma^*\gamma \rightarrow M\bar{M}$

*Thursday 27 October 2022 14:00 (30 minutes)*

**Presenter:** SONG, Qintao (École Polytechnique)

**Session Classification:** CFF and GPDs extraction

Contribution ID: 15

Type: **not specified**

## **GUMP GPDs global analysis**

*Thursday 27 October 2022 14:30 (30 minutes)*

**Presenter:** GUO, Yuxun

**Session Classification:** CFF and GPDs extraction

Contribution ID: **16**

Type: **not specified**

## **GPD studies with hard exclusive processes**

*Thursday 27 October 2022 15:00 (30 minutes)*

**Presenter:** ČUIĆ, Marija

**Session Classification:** CFF and GPDs extraction



Contribution ID: 17

Type: **not specified**

## Unbiased extraction of GPDs

*Thursday 27 October 2022 16:00 (30 minutes)*

**Presenter:** SZNAJDER, Paweł (National Centre for Nuclear Research)

**Session Classification:** CFF and GPDs extraction

Contribution ID: **18**

Type: **not specified**

# Deep learning models for exclusive reactions

*Thursday 27 October 2022 16:30 (30 minutes)*

**Presenter:** KRIESTEN, Brandon

**Session Classification:** CFF and GPDs extraction

Contribution ID: 19

Type: **not specified**

## Diphoton photoproduction on a nucleon at next to leading order

*Wednesday 26 October 2022 17:00 (30 minutes)*

**Presenter:** SZYMANOWSKI, Lech (National Centre for Nuclear Research)

**Session Classification:** DVMP and multiparticle exclusive processes

Contribution ID: 20

Type: **not specified**

## Hard Exclusive Meson Production at COMPASS

*Friday 28 October 2022 09:30 (30 minutes)*

**Presenter:** Mr AUGSTEN, Kamil (Czech Technical University (CZ))

**Session Classification:** DVMP and multiparticle exclusive processes

Contribution ID: 21

Type: **not specified**

## Higher order and higher-twist aspects of DV and photoproduction of mesons

*Friday 28 October 2022 10:00 (30 minutes)*

**Presenter:** PASSEK-KUMERIČKI, Kornelija (Ruđer Bošković Institute, Zagreb, Croatia)

**Session Classification:** DVMP and multiparticle exclusive processes

Contribution ID: 22

Type: **not specified**

# Opportunities for DDVCS measurements at Jefferson Lab

*Friday 28 October 2022 11:00 (30 minutes)*

**Presenter:** VOUTIER, Eric

**Session Classification:** DVMP and multiparticle exclusive processes

Contribution ID: 23

Type: **not specified**

# Phenomenology of DDVCS in the era of new experiments

*Friday 28 October 2022 11:30 (30 minutes)*

**Presenter:** MARTINEZ, Victor

**Session Classification:** DVMP and multiparticle exclusive processes

Contribution ID: 24

Type: **not specified**

## **Accessing GPDs through the exclusive photoproduction of a photon-meson pair with a large invariant mass**

*Friday 28 October 2022 12:00 (30 minutes)*

**Presenter:** NABEEBACCUS, Saad (IJCLab)

**Session Classification:** DVMP and multiparticle exclusive processes



Contribution ID: 25

Type: **not specified**

# Nucleon GPDs & Valence Light Front Wave Functions

*Friday 28 October 2022 14:00 (30 minutes)*

**Presenter:** RIBERDY, Michael (CEA)

**Session Classification:** Modelling, coding and extraction efforts

Contribution ID: 26

Type: **not specified**

## **Inverting the Radon Transform using artificial neural networks**

*Friday 28 October 2022 14:30 (30 minutes)*

**Presenter:** DALL'OLIO, Pietro (Universidad de Huelva)

**Session Classification:** Modelling, coding and extraction efforts

Contribution ID: 27

Type: **not specified**

## Updates from JAM collaboration

*Friday 28 October 2022 15:00 (30 minutes)*

**Presenter:** SATO, nobuo (jlab)

**Session Classification:** Modelling, coding and extraction efforts

Contribution ID: 28

Type: **not specified**

## Revisiting GPD evolution in momentum space

*Friday 28 October 2022 16:00 (30 minutes)*

**Presenter:** Dr BERTONE, Valerio (C.E.A. Paris-Saclay)

**Session Classification:** Modelling, coding and extraction efforts

Contribution ID: 29

Type: **not specified**

## **Discussion Session : Synergy between public codes and integration of state-the-art theoretical developments**

*Friday 28 October 2022 16:30 (1 hour)*

**Session Classification:** Modelling, coding and extraction efforts

Contribution ID: **30**

Type: **not specified**

## **The DVCS experimental program @ Jefferson Lab**

*Thursday 27 October 2022 09:30 (30 minutes)*

**Presenter:** Dr DEFURNE, maxime (CEA-Saclay)

**Session Classification:** High precision DVCS

Contribution ID: **31**

Type: **not specified**

# Higher-power kinematic corrections in DVCS

*Thursday 27 October 2022 10:00 (30 minutes)*

**Presenter:** BRAUN, Vladimir (University of Regensburg)

**Session Classification:** High precision DVCS

Contribution ID: 32

Type: **not specified**

## Deeply-virtual Compton scattering at the next-to-next-to-leading order

*Thursday 27 October 2022 11:00 (30 minutes)*

**Presenter:** SCHÖNLEBER, Jakob (University of Regensburg)

**Session Classification:** High precision DVCS



Contribution ID: 33

Type: **not specified**

## Gepard - tool for studying GPDs

*Thursday 27 October 2022 11:30 (30 minutes)*

**Presenter:** KUMERICKI, Kresimir

**Session Classification:** High precision DVCS

Contribution ID: **34**

Type: **not specified**

## Status of PARTONS

*Thursday 27 October 2022 12:00 (30 minutes)*

**Presenter:** MOUTARDE, Hervé

**Session Classification:** High precision DVCS

Contribution ID: 36

Type: **not specified**

## Pion from Minkowski space dynamics

*Thursday 27 October 2022 17:00 (30 minutes)*

**Presenter:** FREDERICO, Tobias

**Session Classification:** Continuum Models