

# International workshop on CLAS12 physics and future perspectives at JLab



## Report of Contributions

Contribution ID: 1

Type: **not specified**

## Welcome and presentation of IJCLab

*Tuesday, March 21, 2023 8:30 AM (30 minutes)*

**Presenter:** Prof. STOCCHI, Achille (IJCLab)

**Session Classification:** Plenary 1

Contribution ID: 2

Type: **not specified**

## **Status and perspectives for nuclear physics at IN2P3**

*Wednesday, March 22, 2023 8:30 AM (30 minutes)*

**Presenter:** GRASSO, Marcella

**Session Classification:** Plenary 2

Contribution ID: 3

Type: **not specified**

## Status of Jefferson Lab

*Tuesday, March 21, 2023 9:00 AM (30 minutes)*

**Presenter:** DEAN, David (Thomas Jefferson National Accelerator Facility)

**Session Classification:** Plenary 1

Contribution ID: 4

Type: **not specified**

## Status of Hall B

*Tuesday, March 21, 2023 9:30 AM (30 minutes)*

**Presenter:** ACHENBACH, Patrick (Jefferson Lab)

**Session Classification:** Plenary 1

Contribution ID: 5

Type: **not specified**

## Status of CEBAF upgrades

*Tuesday, March 21, 2023 11:00 AM (25 minutes)*

**Presenter:** BOGACZ, Alex (Jefferson Lab)

**Session Classification:** Plenary 1

Contribution ID: 6

Type: **not specified**

## **Fixed-target experimental program at LHCb**

*Tuesday, March 21, 2023 2:00 PM (30 minutes)*

**Presenter:** ROBBE, Patrick (IJCLab)

**Session Classification:** Plenary 1

Contribution ID: 7

Type: **not specified**

## **AMBER: a new QCD facility at CERN**

*Tuesday, March 21, 2023 2:30 PM (30 minutes)*

**Presenter:** FRIEDRICH, Jan (TU Munich)

**Session Classification:** Plenary 1



Contribution ID: 8

Type: **not specified**

## **Physics Perspectives for an energy upgrade at Jefferson Lab**

*Tuesday, March 21, 2023 10:00 AM (30 minutes)*

**Presenter:** ROSSI, Patrizia (Jefferson Lab)

**Session Classification:** Plenary 1

Contribution ID: **10**

Type: **not specified**

## **Perspectives in Hadron Spectroscopy**

*Thursday, March 23, 2023 8:30 AM (30 minutes)*

**Presenter:** MATHIEU, Vincent (University of Barcelona)

**Session Classification:** Plenary 3

Contribution ID: 11

Type: **not specified**

## **The Nuclear Core and Non-Nucleonic Components in Nuclei**

*Thursday, March 23, 2023 11:25 AM (30 minutes)*

**Presenter:** SARGSIAN, Misak (Florida International University)

**Session Classification:** Plenary 3

Contribution ID: 12

Type: **not specified**

## **Status and perspectives for GPD extraction**

*Wednesday, March 22, 2023 9:30 AM (30 minutes)*

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

**Session Classification:** Plenary 2

Contribution ID: 13

Type: **not specified**

## Status and perspectives for TMD extraction

*Wednesday, March 22, 2023 2:20 PM (30 minutes)*

**Presenter:** BERTONE, Valerio (IRFU, CEA, Université Paris-Saclay)

**Session Classification:** Plenary 2

Contribution ID: 14

Type: **not specified**

## **Machine Learning in HEP experiments**

*Wednesday, March 22, 2023 4:30 PM (30 minutes)*

**Presenter:** Mr ROUSSEAU, David (IJCLab, Orsay, France)

**Session Classification:** Plenary 2

Contribution ID: 21

Type: **not specified**

## **Suppression of neutral pion production in deep-inelastic scattering off nuclei with the CLAS detector**

*Thursday, March 23, 2023 11:55 AM (25 minutes)*

**Presenter:** MINEEVA, Taisiya (UTFSM)

**Session Classification:** Plenary 3

Contribution ID: 22

Type: **not specified**

## **Beam spin asymmetries for DVCS on proton and neutron from a deuterium target**

**Presenter:** HOBART (HOBALLAH), Adam (mostafa) (IJCLab)

**Session Classification:** Plenary 4



Contribution ID: 23

Type: **not specified**

## **Performances of the longitudinally polarized target for CLAS12**

*Tuesday, March 21, 2023 4:20 PM (25 minutes)*

**Presenter:** BROCK, James (Thomas Jefferson National Accelerator Facility)

**Session Classification:** Plenary 1

Contribution ID: 24

Type: **not specified**

## Update on RG-G preparation

*Tuesday, March 21, 2023 5:10 PM (25 minutes)*

**Presenter:** KUHN, Sebastian (Old Dominion University)

**Session Classification:** Plenary 1

Contribution ID: 25

Type: **not specified**

## Update on RG-E preparation

*Thursday, March 23, 2023 3:10 PM (25 minutes)*

**Presenter:** HAKOBYAN, Hayk (Universidad Tecnica Federico Santa Maria)

**Session Classification:** Plenary 3

Contribution ID: 26

Type: **not specified**

## Proposal for TPE with positron beam

*Tuesday, March 21, 2023 11:50 AM (25 minutes)*

**Presenter:** SCHMIDT, Axel (George Washington University)

**Session Classification:** Plenary 1

Contribution ID: 27

Type: **not specified**

## **K-long Facility in Hall D at JLab**

*Tuesday, March 21, 2023 3:00 PM (25 minutes)*

**Presenter:** AMARYAN, Moskov (ODU)

**Session Classification:** Plenary 1

Contribution ID: 28

Type: **not specified**

## **First measurement of hard exclusive pi-Delta++ electroproduction beam-spin asymmetries off the proton**

*Friday, March 24, 2023 8:55 AM (25 minutes)*

**Presenter:** DIEHL, Stefan (Justus Liebig University Giessen and University of Connecticut)

**Session Classification:** Plenary 4

Contribution ID: 29

Type: **not specified**

## **Beam Spin Asymmetry measurements of Deeply Virtual $\pi^0$ Production with CLAS12**

*Wednesday, March 22, 2023 11:20 AM (25 minutes)*

**Presenter:** KIM, Andrey (University of Connecticut)

**Session Classification:** Plenary 2

Contribution ID: **30**

Type: **not specified**

## **Cross section for J/psi photoproduction**

*Friday, March 24, 2023 11:50 AM (25 minutes)*

**Presenter:** CHATAGNON, Pierre (JLab)

**Session Classification:** Plenary 4



Contribution ID: 31

Type: **not specified**

## Update on RGH preparation

*Tuesday, March 21, 2023 5:35 PM (25 minutes)*

**Presenter:** CONTALBRIGO, Marco (INFN Ferrara)

**Session Classification:** Plenary 1

Contribution ID: 32

Type: **not specified**

## **RG-C end of run and first look at physics**

*Tuesday, March 21, 2023 4:45 PM (25 minutes)*

**Presenter:** PILLEUX, Noémie

**Session Classification:** Plenary 1

Contribution ID: 33

Type: **not specified**

## The MesonEx experiment

*Thursday, March 23, 2023 9:00 AM (25 minutes)*

**Presenter:** BATTAGLIERI, Marco (INFN-GE)

**Session Classification:** Plenary 3

Contribution ID: 34

Type: **not specified**

## **Phi-electroproduction on neutron/proton with RGB**

*Friday, March 24, 2023 9:45 AM (20 minutes)*

**Presenter:** RAMASUBRAMANIAN, Niveditha (IRFU, CEA, Saclay)

**Session Classification:** Plenary 4

Contribution ID: 35

Type: **not specified**

## Update on BONUS12 analysis

*Friday, March 24, 2023 9:20 AM (25 minutes)*

**Presenter:** POKHREL, MADHUSUDHAN (Old Dominion University)

**Session Classification:** Plenary 4

Contribution ID: 36

Type: **not specified**

## Update on RG-D Status and Run Preparation

*Thursday, March 23, 2023 4:00 PM (25 minutes)*

**Presenter:** EL FASSI, Lamiaa (Mississippi State University)

**Session Classification:** Plenary 3

Contribution ID: 37

Type: **not specified**

## The CEBAF Positron Beam upgrade

*Tuesday, March 21, 2023 11:25 AM (25 minutes)*

**Presenter:** ROBLIN, Yves (Thomas Jefferson National Lab)

**Session Classification:** Plenary 1

Contribution ID: **38**

Type: **not specified**

## **Luminosity upgrade for CLAS12**

*Tuesday, March 21, 2023 12:15 PM (25 minutes)*

**Presenter:** PAREMUZYAN, Rafayel (Jefferson Lab)

**Session Classification:** Plenary 1



Contribution ID: 40

Type: **not specified**

## **Status and perspectives for hadron physics at IRFU**

*Wednesday, March 22, 2023 9:00 AM (30 minutes)*

**Presenter:** MOUTARDE, Hervé (Irfu, CEA)

**Session Classification:** Plenary 2

Contribution ID: 41

Type: **not specified**

## **Beam spin asymmetries for DVCS on proton and neutron from a deuterium target**

*Wednesday, March 22, 2023 10:00 AM (25 minutes)*

**Presenter:** HOBART (HOBALLAH), Adam (mostafa) (IJCLab)

**Session Classification:** Plenary 2

Contribution ID: 42

Type: **not specified**

## **A model for coherent and incoherent DVCS in light nuclei**

*Wednesday, March 22, 2023 11:45 AM (25 minutes)*

**Presenter:** FUCINI, Sara (IJCLab, CNRS- Université Paris-Saclay)

**Session Classification:** Plenary 2

Contribution ID: 43

Type: **not specified**

## **The next steps for fracture functions at CLAS12**

*Wednesday, March 22, 2023 2:50 PM (25 minutes)*

**Presenter:** HAYWARD, Timothy (University of Connecticut)

**Session Classification:** Plenary 2

Contribution ID: 45

Type: **not specified**

## **Measurements of the $\text{Cos}\varphi$ and $\text{Cos}2\varphi$ Moments of the Unpolarized SIDIS $\pi^+$ Cross-section from RG-A data**

*Wednesday, March 22, 2023 3:15 PM (25 minutes)*

**Presenter:** CAPOBIANCO, Richard (University of Connecticut)

**Session Classification:** Plenary 2

Contribution ID: 46

Type: **not specified**

## **TMDs with RG-D**

*Wednesday, March 22, 2023 3:40 PM (20 minutes)*

**Presenter:** MATAMOROS, Daniel (IJClab)

**Session Classification:** Plenary 2

Contribution ID: 47

Type: **not specified**

## AI in CLAS12 analyses

*Wednesday, March 22, 2023 5:00 PM (25 minutes)*

**Presenter:** PHELPS, William (Christopher Newport University/Jefferson Lab)

**Session Classification:** Plenary 2

Contribution ID: 48

Type: **not specified**

## Usage of Machine Learning in CLAS12

*Wednesday, March 22, 2023 5:25 PM (25 minutes)*

**Presenter:** GAVALIAN, Gagik (Jefferson Lab)

**Session Classification:** Plenary 2



Contribution ID: 49

Type: **not specified**

## CVT tracking, status and plans

*Wednesday, March 22, 2023 5:50 PM (25 minutes)*

**Presenter:** ZIEGLER, Veronique (Jefferson National Lab)

**Session Classification:** Plenary 2

Contribution ID: 50

Type: **not specified**

## **KLambda photoproduction on g9a**

*Thursday, March 23, 2023 9:25 AM (25 minutes)*

**Presenter:** FEGAN, Stuart (University of York)

**Session Classification:** Plenary 3

Contribution ID: 51

Type: **not specified**

## **Status of the Hall-B targets for CLAS12 experiments**

*Tuesday, March 21, 2023 3:25 PM (25 minutes)*

**Presenter:** WEI, Xiangdong (Jefferson Lab)

**Session Classification:** Plenary 1

Contribution ID: 52

Type: **not specified**

## **Electron Beam Energy Reconstruction From Many Charged Body Final States**

*Thursday, March 23, 2023 12:20 PM (25 minutes)*

**Presenter:** WILLIAMS, Rhidian (University of York)

**Session Classification:** Plenary 3

Contribution ID: 53

Type: **not specified**

## **Di-hadron analysis update (title TBC)**

*Thursday, March 23, 2023 2:00 PM (25 minutes)*

**Presenter:** PAUL, Sebouh (University of California Riverside)

**Session Classification:** Plenary 3

Contribution ID: 54

Type: **not specified**

## **CND neutron detection**

*Thursday, March 23, 2023 2:25 PM (20 minutes)*

**Presenter:** SEROKA, Erin (The George Washington University)

**Session Classification:** Plenary 3

Contribution ID: 55

Type: **not specified**

## **ALERT update**

*Thursday, March 23, 2023 3:35 PM (25 minutes)*

**Presenter:** MEZIANI, Zein-Eddine (Argonne National Laboratory)

**Session Classification:** Plenary 3

Contribution ID: 56

Type: **not specified**

## **J/psi photoproduction on neutron and proton**

*Friday, March 24, 2023 11:25 AM (25 minutes)*

**Presenter:** TYSON, Richard (University of Glasgow)

**Session Classification:** Plenary 4



Contribution ID: 57

Type: **not specified**

## Collaboration status and closeout

*Friday, March 24, 2023 12:15 PM (25 minutes)*

**Presenter:** NICCOLAI, Silvia (IJCLab)

**Session Classification:** Plenary 4

Contribution ID: 58

Type: **not specified**

## **Measurement of the helicity asymmetry E for the gamma p $\rightarrow$ $\pi^0$ p reaction in the resonance region**

*Thursday, March 23, 2023 9:50 AM (20 minutes)*

**Presenter:** ZACHARIOU, Nicholas (University of York)

**Session Classification:** Plenary 3

Contribution ID: 59

Type: **not specified**

## **Impact of Neutron DVCS Measurements on Extraction of Compton Form Factors**

*Wednesday, March 22, 2023 10:55 AM (25 minutes)*

**Presenter:** CUIC, Marija (Faculty of Science, University of Zagreb)

**Session Classification:** Plenary 2

Contribution ID: **60**

Type: **not specified**

## **Reconstruction: what comes after pass2**

*Wednesday, March 22, 2023 6:15 PM (25 minutes)*

**Presenter:** BALTZELL, Nathan

**Session Classification:** Plenary 2

Contribution ID: 61

Type: **not specified**

## **A Machine Learning approach for DVCS identification without proton detection**

*Wednesday, March 22, 2023 12:10 PM (20 minutes)*

**Presenter:** ALVARADO, Juan Sebastian (IJCLab)

**Session Classification:** Plenary 2

Contribution ID: 62

Type: **not specified**

## **J/psi photoproduction near threshold**

*Thursday, March 23, 2023 10:10 AM (20 minutes)*

**Presenter:** PITA, Mariana (Old Dominion University)

**Session Classification:** Plenary 3

Contribution ID: **63**

Type: **not specified**

## **RGM update**

*Thursday, March 23, 2023 2:45 PM (25 minutes)*

**Presenter:** FEGAN, Stuart (University of York)

**Session Classification:** Plenary 3

Contribution ID: **64**

Type: **not specified**

## **nDVCS with tagged spectator proton**

*Wednesday, March 22, 2023 2:00 PM (20 minutes)*

**Presenter:** OUILLON, Mathieu (CNRS)

**Session Classification:** Plenary 2



Contribution ID: 65

Type: **not specified**

## Light Meson Decays at Jefferson Lab

*Thursday, March 23, 2023 11:00 AM (25 minutes)*

**Presenter:** SCHADMAND, Susan (GSI Darmstadt)

**Session Classification:** Plenary 3

Contribution ID: **66**

Type: **not specified**

## **Inclusive cross sections with RGA data**

*Friday, March 24, 2023 11:00 AM (25 minutes)*

**Presenter:** KLIMENKO, Valerii

**Session Classification:** Plenary 4

Contribution ID: 67

Type: **not specified**

## **"Exclusive phi electroproduction cross section with RG-A data"**

*Friday, March 24, 2023 10:05 AM (25 minutes)*

**Presenter:** MORAN, Patrick

**Session Classification:** Plenary 4

Contribution ID: **68**

Type: **not specified**

## **Membership committee meeting**

*Tuesday, March 21, 2023 6:00 PM (1 hour)*

**Presenter:** Dr MCKINNON, Bryan (University of Glasgow)

**Session Classification:** Membership committee meeting