

**xFitter External meeting**

# **Report of Contributions**

Contribution ID: 3

Type: **not specified**

## Opening remarks

*Tuesday, 2 May 2023 11:00 (10 minutes)*

**Presenter:** Dr GIULI, Francesco (CERN)

**Session Classification:** Session

Contribution ID: 4

Type: **not specified**

## Current xFitter version

*Tuesday, 2 May 2023 11:10 (30 minutes)*

**Presenter:** GLAZOV, Alexander (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Session

Contribution ID: 5

Type: **not specified**

## **xFitter usage in the SURGE and HEFTY collaborations**

*Tuesday, 2 May 2023 14:00 (30 minutes)*

**Presenter:** Prof. OLNESS, Fred (Southern Methodist University (US))

**Session Classification:** Session

Contribution ID: 6

Type: **not specified**

## **xFitter usage at the EIC**

*Tuesday, 2 May 2023 14:30 (30 minutes)*

**Presenter:** Dr HOBBS, TIMOTHY J (Argonne National Laboratory)

**Session Classification:** Session

Contribution ID: 7

Type: **not specified**

## **New ATLAS measurements sensitive to PDFs**

*Tuesday, 2 May 2023 16:00 (30 minutes)*

**Presenter:** SARKAR, Amanda (University of Oxford (GB))

**Session Classification:** Session

Contribution ID: 9

Type: **not specified**

## AFB and high-x PDF behaviour

*Wednesday, 3 May 2023 14:00 (30 minutes)*

**Presenter:** Dr FIASCHI, Juri (University of Liverpool)

**Session Classification:** Session 3

Contribution ID: **10**

Type: **not specified**

## **Exploring SMEFT couplings using Forward-Backward Asymmetry**

*Wednesday, 3 May 2023 14:30 (30 minutes)*

**Presenter:** ZENAIEV, Oleksandr (Hamburg University)

**Session Classification:** Session 3



Contribution ID: 11

Type: **not specified**

## The L2 sensitivity paper

*Wednesday, 3 May 2023 16:00 (30 minutes)*

**Presenters:** HUSTON, Joey (Michigan State University (US)); Prof. NADOLSKY, Pavel (Southern Methodist University)

**Session Classification:** Session 3

Contribution ID: 12

Type: **not specified**

## Quantification of the epistemic PDF uncertainty

*Wednesday, 3 May 2023 16:30 (30 minutes)*

**Presenter:** COURTOY, Aurore (Instituto de Física, UNAM)

**Session Classification:** Session 3

Contribution ID: 13

Type: **not specified**

## **New CMS measurements sensitive to PDFs and feedback from the LHC EW WG**

*Tuesday, 2 May 2023 16:30 (30 minutes)*

**Presenter:** AMOROSO, Simone (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Session

Contribution ID: 14

Type: **not specified**

## APPLfast update

*Thursday, 4 May 2023 16:00 (30 minutes)*

**Presenters:** GWENLAN, Claire (University of Oxford (GB)); Mr KUNZ, Lucas (KIT - Karlsruhe Institute of Technology (DE))

**Session Classification:** Session 3

Contribution ID: 15

Type: **not specified**

## **MATRIX interface to fast-interpolation tools**

*Thursday, 4 May 2023 16:30 (30 minutes)*

**Presenters:** KALLWEIT, Stefan (Universita & INFN, Milano-Bicocca (IT)); JEZO, Tomas (WWU ITP)

**Session Classification:** Session 3

Contribution ID: 16

Type: **not specified**

## **PineAPPL interface to xFitter and MSR mass studies with MCFM**

*Thursday, 4 May 2023 17:00 (30 minutes)*

**Presenter:** Dr MAKELA, Toni (NCBJ)

**Session Classification:** Session 3

Contribution ID: 17

Type: **not specified**

## Including qT-resummation in DY and its impact on PDF fits

*Thursday, 4 May 2023 14:00 (30 minutes)*

**Presenter:** GUIDA, Alessandro (Humboldt University of Berlin (DE))

**Session Classification:** Session 3

Contribution ID: 19

Type: **not specified**

## Running of the weak mixing angle at the LHC

*Thursday, 4 May 2023 14:30 (30 minutes)*

**Presenter:** VAZZOLER, Federico (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Session 3



Contribution ID: 20

Type: **not specified**

## **Bézier curves and pion PDFs with xFitter**

*Wednesday, 3 May 2023 17:00 (30 minutes)*

**Presenter:** KOTZ, Lucas

**Session Classification:** Session 3

Contribution ID: **21**

Type: **not specified**

## **Kaon PDF/FFs**

*Wednesday, 3 May 2023 10:00 (30 minutes)*

**Presenter:** ABDOLMALEKI, Hamed

**Session Classification:** Session 4

Contribution ID: 23

Type: **not specified**

## **A model for pion collinear parton distribution function and form factor**

*Wednesday, 3 May 2023 09:30 (30 minutes)*

**Presenter:** VENTURINI, SIMONE (University of Pavia)

**Session Classification:** Session 4

Contribution ID: 25

Type: **not specified**

## Impact of J/psi production data on PDFs - bug report

*Friday, 5 May 2023 09:00 (30 minutes)*

**Presenter:** FLETT, Chris (IJCLab)

**Session Classification:** Debug and code developments

Contribution ID: 28

Type: **not specified**

## **N3LO PDF evolution and APFEL update**

*Thursday, 4 May 2023 09:00 (30 minutes)*

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

**Session Classification:** Session 4

Contribution ID: 29

Type: **not specified**

## **DYTURBO interface and its applications**

*Thursday, 4 May 2023 09:30 (30 minutes)*

**Presenter:** CAMARDA, Stefano (CERN)

**Session Classification:** Session 4

Contribution ID: **31**

Type: **not specified**

## Recent developments on TMD-PB fits

*Thursday, 4 May 2023 11:00 (30 minutes)*

**Presenters:** JUNG, Hannes (Deutsches Elektronen-Synchrotron (DE)); TAHERI MONFARED, Sara (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Session 4

Contribution ID: 32

Type: **not specified**

## **A data-driven test of a quantum-statistics PDF parametrisation**

*Wednesday, 3 May 2023 11:00 (30 minutes)*

**Presenters:** SILVETTI, Federico (INFN - National Institute for Nuclear Physics); BONVINI, Marco (INFN, Rome 1 Unit)

**Session Classification:** Debug and code developments



Contribution ID: 33

Type: **not specified**

## Brainstorming

*Tuesday, 2 May 2023 11:40 (50 minutes)*

**Presenters:** GLAZOV, Alexander (Deutsches Elektronen-Synchrotron (DE)); Dr GIULI, Francesco (CERN); ZENAIEV, Oleksandr (Hamburg University); AMOROSO, Simone (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Session

Contribution ID: **34**

Type: **not specified**

## **SMEFT studies with EIC and LHeC DIS pseudo data**

*Wednesday, 3 May 2023 15:00 (30 minutes)*

**Presenter:** BISSOLOTTI, Chiara (Argonne National Laboratory)

**Session Classification:** Session 3

Contribution ID: 35

Type: **not specified**

## Bayesian PDF fits to ZEUS high-x data

*Friday, 5 May 2023 09:30 (30 minutes)*

**Presenter:** BOTJE, Michiel (Nikhef National institute for subatomic physics (NL))

**Session Classification:** Debug and code developments

Contribution ID: 36

Type: **not specified**

## **Brainstorming on possible xFitter analyses with EIC data**

*Tuesday, 2 May 2023 17:00 (30 minutes)*

**Session Classification:** Session

Contribution ID: 37

Type: **not specified**

## Hesse vs Iterate error bands

*Wednesday, 3 May 2023 11:30 (20 minutes)*

**Presenters:** GLAZOV, Alexander (Deutsches Elektronen-Synchrotron (DE)); Dr GIULI, Francesco (CERN)

**Session Classification:** Debug and code developments

Contribution ID: **38**

Type: **not specified**

## Coding session

*Friday, 5 May 2023 11:00 (1h 30m)*

**Presenters:** GLAZOV, Alexander (Deutsches Elektronen-Synchrotron (DE)); Dr GIULI, Francesco (CERN)

**Session Classification:** Code developments and closing remarks