

# **Diffraction and gluon saturation at the LHC and the EIC**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

# Welcome

*Monday, June 10, 2024 9:30 AM (5 minutes)*

**Presenters:** DESHPANDE, Abhay (Stony Brook University); SABIO VERA, Agustin (University Autonomy de Madrid); ROYON, Christophe; HENTSCHINSKI, Martin (Universidad de Las Americas Puebla); SCHLICHTING, Soeren (University of Bielefeld)

Contribution ID: 2

Type: **not specified**

# The discovery of the Odderon

*Monday, June 10, 2024 9:50 AM (35 minutes)*

**Presenter:** NEMES, Frigyes (CERN)

Contribution ID: 3

Type: **not specified**

# Levy distributions in elastic pp collisions at LHC energies

*Monday, June 10, 2024 11:20 AM (35 minutes)*

**Presenter:** CSORGO, Tamas (MATE Institute of Technology KRC, Gyongyos and Wigner RCP, Budapest)

Contribution ID: 4

Type: **not specified**

## **Odderon at the EIC from exclusive $\chi_c$ productions at high energies**

*Monday, June 10, 2024 10:25 AM (35 minutes)*

**Presenter:** BENIC, Sanjin

Contribution ID: 5

Type: **not specified**

# Levy alpha-stable generalization of the ReBB model

*Monday, June 10, 2024 11:55 AM (35 minutes)*

**Presenter:** SZANYI, István (MATE KRC, University of Kansas, Eötvös University)

Contribution ID: 6

Type: **not specified**

## **Discussion: soft diffraction, odderon**

*Monday, June 10, 2024 12:30 PM (30 minutes)*

Contribution ID: 7

Type: **not specified**

## **Inclusive diffraction at the EIC**

*Monday, June 10, 2024 2:00 PM (35 minutes)*

**Presenter:** STASTO, Anna (Penn State)



Contribution ID: 8

Type: **not specified**

## **Diffractional PDFs from moderate to small-x**

*Monday, June 10, 2024 2:35 PM (35 minutes)*

**Presenter:** YUAN, Feng (Lawrence Berkeley National Laboratory)

Contribution ID: 9

Type: **not specified**

# Large Rapidity Gaps in proton-nucleus interactions

*Tuesday, June 11, 2024 2:00 PM (35 minutes)*

**Presenter:** Prof. KHOZE, Valeri (IPPP, Durham University)

Contribution ID: **10**

Type: **not specified**

## **Diffractive top pair production at LHC**

*Monday, June 10, 2024 4:15 PM (35 minutes)*

**Presenter:** ERNANI MARTINS NETO, Daniel (IFJ - PAN Kraków)

Contribution ID: **11**

Type: **not specified**

## **Discussion: hard diffraction, gap definition**

*Monday, June 10, 2024 4:50 PM (40 minutes)*

Contribution ID: 12

Type: **not specified**

## Hard diffraction with hadronic final states with CMS

*Tuesday, June 11, 2024 9:30 AM (35 minutes)*

**Presenter:** BALDENEGRO, Cristian (The University of Kansas (US))

Contribution ID: 13

Type: **not specified**

## Jet gap jets and forward jet production

*Tuesday, June 11, 2024 10:05 AM (35 minutes)*

**Presenter:** ROYON, Christophe

Contribution ID: 15

Type: **not specified**

## **Non-linear effects in a matrix representation**

**Presenter:** SABIO VERA, Agustin (University Autonomy de Madrid)

Contribution ID: **16**

Type: **not specified**

## **Discussion: low x, BFKL, new variables**

*Tuesday, June 11, 2024 12:20 PM (40 minutes)*



Contribution ID: 17

Type: **not specified**

## **Towards a formalization of high energy factorization at NLO**

*Tuesday, June 11, 2024 2:35 PM (35 minutes)*

**Presenter:** HENTSCHINSKI, Martin (Universidad de Las Americas Puebla)

Contribution ID: **19**

Type: **not specified**

# Forward Higgs production in the infinite-top-mass limit

*Tuesday, June 11, 2024 3:40 PM (35 minutes)*

**Presenter:** PAPA, Alessandro (Università della Calabria & INFN-Cosenza)

Contribution ID: 20

Type: **not specified**

## **Overview of ATLAS forward proton detectors: status, performance**

*Monday, June 10, 2024 3:40 PM (35 minutes)*

**Presenter:** TRZEBINSKI, Maciej (IFJ PAN)

Contribution ID: 21

Type: **not specified**

## **Discussion: theory, diffraction, gap definition**

*Tuesday, June 11, 2024 4:15 PM (40 minutes)*

Contribution ID: 22

Type: **not specified**

## Vector meson and charm production in HIN

*Wednesday, June 12, 2024 9:30 AM (35 minutes)*

**Presenter:** INNOCENTI, Gian Michele (CERN)

Contribution ID: 23

Type: **not specified**

## **Probing gluon saturation in exclusive vector meson production**

*Wednesday, June 12, 2024 10:05 AM (35 minutes)*

**Presenter:** Dr MÄNTYSAARI, Heikki (University of Jyväskylä)

Contribution ID: 24

Type: **not specified**

## Recent results on J/psi photoproduction in UPCs with ALICE

*Wednesday, June 12, 2024 11:10 AM (35 minutes)*

**Presenter:** BYLINKIN, Alexander (University of Bergen)

Contribution ID: 25

Type: **not specified**

# The color-glass condensate and the impact parameter

*Wednesday, June 12, 2024 11:45 AM (35 minutes)*

**Presenter:** PENTTALA, Jani (UCLA)



Contribution ID: 26

Type: **not specified**

## **Discussion: saturation, observables, CGC**

*Wednesday, June 12, 2024 12:20 PM (40 minutes)*

Contribution ID: 27

Type: **not specified**

## NLO calculations in the dipole picture

*Wednesday, June 12, 2024 2:00 PM (35 minutes)*

**Presenter:** LAPPI, Tuomas (University of Jyväskylä, Jyväskylä/Fi)

Contribution ID: 28

Type: **not specified**

# **The ALICE FoCal upgrade: Connecting forward LHC and the EIC**

*Wednesday, June 12, 2024 2:35 PM (35 minutes)*

**Presenter:** STRANGMANN, Nicolas (Goethe University Frankfurt)

Contribution ID: 29

Type: **not specified**

## Exploring light hadrons in ultra-peripheral Pb–Pb collisions with ALICE

*Wednesday, June 12, 2024 3:40 PM (35 minutes)*

**Presenter:** KIM, Minjung (UC Berkeley)

Contribution ID: **30**

Type: **not specified**

## Inferring the Initial Condition for the BK equation

*Wednesday, June 12, 2024 4:15 PM (35 minutes)*

**Presenter:** CASUGA, Carlisle Aurabelle (University of Jyväskylä)

Contribution ID: **31**

Type: **not specified**

## **Discussion: saturation, observables, CGC**

*Wednesday, June 12, 2024 4:50 PM (40 minutes)*

Contribution ID: **32**

Type: **not specified**

## PPS results and prospects

*Thursday, June 13, 2024 9:30 AM (35 minutes)*

**Presenter:** PITT, Michael

Contribution ID: 33

Type: **not specified**

## Exclusive and diffractive physics with ATLAS

*Thursday, June 13, 2024 10:05 AM (35 minutes)*

**Presenter:** BERESFORD, Lydia (DESY)



Contribution ID: **34**

Type: **not specified**

## **Tetraquark candidates in central exclusive production**

*Thursday, June 13, 2024 11:10 AM (35 minutes)*

**Presenter:** MCNULTY, Ronan (University College Dublin)

Contribution ID: 35

Type: **not specified**

## Gamma gamma and tau tau productions in HIN

*Thursday, June 13, 2024 11:45 AM (35 minutes)*

**Presenter:** KRINTIRAS, Georgios (The University of Kansas (US))

Contribution ID: 36

Type: **not specified**

## **Discussion: exclusive diffraction, photon exchanges**

*Thursday, June 13, 2024 12:20 PM (40 minutes)*

Contribution ID: 37

Type: **not specified**

## **TMD evolution at small x**

*Thursday, June 13, 2024 2:35 PM (35 minutes)*

**Presenter:** IANCU, Edmond (IPhT Saclay)

Contribution ID: **38**

Type: **not specified**

## **Diffractive jet production in photon-nucleus collisions**

*Thursday, June 13, 2024 2:00 PM (35 minutes)*

**Presenter:** TRIANTAFYLLOPOULOS, Dionysios (ECT\*, Italy)

Contribution ID: 39

Type: **not specified**

## Investigating gluonic saturation through deeply virtual meson production at the twist-3

*Thursday, June 13, 2024 3:40 PM (35 minutes)*

**Presenter:** FUCILLA, Michael (Laboratoire de Physique des 2 Infinis Irène Joliot-Curie IJCLab, Université Paris Saclay)

Contribution ID: 40

Type: **not specified**

## **Discussion: saturation, jets, factorisation**

*Thursday, June 13, 2024 4:15 PM (1h 15m)*

Contribution ID: **41**

Type: **not specified**

## EIC physics

*Friday, June 14, 2024 9:30 AM (30 minutes)*

**Presenter:** STASTO, Anna (Penn State)



Contribution ID: 42

Type: **not specified**

## Forward physics at the EIC

*Friday, June 14, 2024 10:00 AM (30 minutes)*

**Presenter:** PITT, Michael

Contribution ID: 43

Type: **not specified**

## Running the LHC in different ion modes

*Friday, June 14, 2024 10:30 AM (30 minutes)*

**Presenter:** INNOCENTI, Gian Michele (CERN)

Contribution ID: 44

Type: **not specified**

## Gamma gamma physics at the LHC

*Friday, June 14, 2024 11:30 AM (30 minutes)*

**Presenter:** ROYON, Christophe

Contribution ID: 45

Type: **not specified**

# The Lund jet plane analysis: towards new shower MC

*Friday, June 14, 2024 12:00 PM (30 minutes)*

**Presenter:** BALDENEGRO, Cristian (The University of Kansas (US))

Contribution ID: 46

Type: **not specified**

## **Discussion: complementarity between LHC and EIC, new ideas**

*Friday, June 14, 2024 12:30 PM (30 minutes)*

Contribution ID: 47

Type: **not specified**

## Welcome and ECT\* presentation

*Monday, June 10, 2024 9:35 AM (15 minutes)*

**Presenter:** VAN KOLCK, Ubirajara (IJCLab Orsay & University of Arizona)

Contribution ID: 48

Type: **not specified**

## Lecture about Bruno Touschek

*Tuesday, June 11, 2024 4:55 PM (30 minutes)*

**Presenter:** PANCHERI, Giulia (INFN di Frascati)