

Saturation and Diffraction at the LHC and the EIC

Report of Contributions

Contribution ID: 2

Type: **not specified**

Welcome

Monday 27 June 2022 09:30 (15 minutes)

Presenters: DESHPANDE, Abhay; SABIO VERA, Agustin; SABIO VERA, Agustin; ROYON, Christophe (The University of Kansas (US)); HENTSCHINSKI, Martin (Universidad de las Americas, Puebla); ARMESTO PEREZ, Nestor (Universidade de Santiago de Compostela (ES)); SCHLICHTING, Soeren (Universität Bielefeld); LAPPI, Tuomas

Contribution ID: 3

Type: **not specified**

Welcome by the ECT* Director

Monday 27 June 2022 09:45 (15 minutes)

Presenter: AARTS, Gert

Contribution ID: 4

Type: **not specified**

Quark-Gluon Plasma properties

Monday 27 June 2022 10:00 (25 minutes)

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

Contribution ID: 5

Type: **not specified**

Next-to-leading order photon+jet production

Monday 27 June 2022 10:25 (25 minutes)

Presenter: MULLAN, Yair

Contribution ID: 6

Type: **not specified**

Pseudo and quasi gluon PDF in the BFKL approximation (online)

Monday 27 June 2022 11:20 (25 minutes)

Presenter: CHIRILLI, Giovanni Antonio

Contribution ID: 7

Type: **not specified**

Evidence for the maximally entangled low x proton in Deep Inelastic Scattering from H1 data (remote)

Monday 27 June 2022 11:45 (25 minutes)

Presenters: KUTAK, Krzysztof; KUTAK, Krzysztof (Instytut Fizyki Jadrowej Polskiej Akademii Nauk)

Contribution ID: 8

Type: **not specified**

Towards a unified scheme for moderate and small x EIC physics

Monday 27 June 2022 12:10 (25 minutes)

Presenter: BOUSSARIE, Renaud (Brookhaven National Lab)

Contribution ID: 9

Type: **not specified**

Discussion: PDF, HIN

Monday 27 June 2022 12:35 (25 minutes)

Presenters: Dr KRINTIRAS, Georgios (The University of Kansas (US)); Prof. SCHLICHTING, Soeren (Universität Bielefeld)

Contribution ID: **10**

Type: **not specified**

New constraints on PDFs, strong coupling, and SMEFT results using CMS jet data

Monday 27 June 2022 14:30 (25 minutes)

Presenter: PITT, Michael (CERN)

Contribution ID: 11

Type: **not specified**

Impact parameter extension to the MVgamma Model and application to forward p-Pb collisions in the rcBK evolved Improved-TMD framework

Monday 27 June 2022 14:55 (25 minutes)

Presenter: DEGANUTTI, Federico

Contribution ID: 12

Type: **not specified**

Nuclear leading twist shadowing and hadron production away from current fragmentation region

Monday 27 June 2022 15:20 (25 minutes)

Presenters: STRIKMAN, Mark (Penn State University); STRIKMAN, Mark (Pennsylvania State University (US))

Contribution ID: 13

Type: **not specified**

Massive quarks in the one-loop photo-to-dipole light cone wave function

Monday 27 June 2022 16:15 (25 minutes)

Presenters: PAATELAINEN, Risto (University of Santiago de Compostela); PAATELAINEN, Risto Sakari (Helsinki Institute of Physics (FI)); LAPPI, Tuomas

Contribution ID: 14

Type: **not specified**

NLO for hybrid kT-factorization and impact factors

Monday 27 June 2022 16:40 (25 minutes)

Presenter: VAN HAMEREN, Andreas

Contribution ID: 15

Type: **not specified**

Discussion: PDF, HIN

Monday 27 June 2022 17:05 (25 minutes)

Presenters: Dr KRINTIRAS, Georgios (The University of Kansas (US)); Prof. SCHLICHTING, Soeren (Universität Bielefeld)

Contribution ID: 16

Type: **not specified**

BFKL phenomenology

Wednesday 29 June 2022 09:55 (25 minutes)

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

Contribution ID: 17

Type: **not specified**

TMD gluon distribution at NLO within high energy factorization

Tuesday 28 June 2022 09:55 (25 minutes)

Presenter: HENTSCHINSKI, Martin (Universidad de las Americas, Puebla)

Contribution ID: **18**

Type: **not specified**

Gluon and nucleon polarization at small-x

Tuesday 28 June 2022 10:20 (25 minutes)

Presenters: CELIBERTO, Francesco Giovanni (Università della Calabria and INFN Cosenza (Italy)); CELIBERTO, Francesco Giovanni (ECT*/FBK Trento & INFN-TIFPA)

Contribution ID: 19

Type: **not specified**

BFKL factorisation of Mueller-Tang jets in NLLA

Tuesday 28 June 2022 11:15 (25 minutes)

Presenter: COLFERAI, Dimitri (University of Florence)

Contribution ID: 20

Type: **not specified**

Mueller-Tang jet phenomenology at the Tevatron and LHC (online)

Tuesday 28 June 2022 11:40 (25 minutes)

Presenter: GONZALES, Pablo

Contribution ID: 21

Type: **not specified**

Diffraction structure functions in the dipole picture

Tuesday 28 June 2022 12:05 (25 minutes)

Presenter: LAPPI, Tuomas

Contribution ID: 22

Type: **not specified**

Discussion: BFKL, low x physics

Tuesday 28 June 2022 12:30 (30 minutes)

Presenters: JALILIAN-MARIAN, Jamal; HENTSCHINSKI, Martin (Universidad de las Americas, Puebla)

Contribution ID: 23

Type: **not specified**

The EIC project

Tuesday 28 June 2022 14:30 (25 minutes)

Presenter: DESHPANDE, Abhay

Contribution ID: 24

Type: **not specified**

The FOCAL project in ALICE

Tuesday 28 June 2022 14:55 (25 minutes)

Presenter: TAPIA TAKAKI, Daniel (University of Kansas)

Contribution ID: 25

Type: **not specified**

Mueller Navelet jets (remote)

Tuesday 28 June 2022 15:20 (25 minutes)

Presenter: KAMPSHOFF, Mats (The University of Kansas (US))

Contribution ID: 26

Type: **not specified**

Two particle correlations in small systems (remote)

Tuesday 28 June 2022 16:15 (25 minutes)

Presenter: MURILLO QUIJADA, Javier Alberto (Universidad de Sonora (MX))

Contribution ID: 27

Type: **not specified**

Forward Higgs boson production in high-energy QCD at next-to-leading order

Tuesday 28 June 2022 16:40 (25 minutes)

Presenter: FUCILLA, MICHAEL

Contribution ID: 28

Type: **not specified**

Discussion: BFKL, low x physics

Tuesday 28 June 2022 17:05 (25 minutes)

Presenters: JALILIAN-MARIAN, Jamal; HENTSCHINSKI, Martin (Universidad de las Americas, Puebla)

Contribution ID: 29

Type: **not specified**

Probing gluon saturation via diffractive jet production at the EIC

Wednesday 29 June 2022 09:30 (25 minutes)

Presenter: IANCU, Edmond (Université Paris-Saclay (FR))

Contribution ID: **30**

Type: **not specified**

Proton hot spots and exclusive vector meson production

Tuesday 28 June 2022 09:30 (25 minutes)

Presenter: SCHLICHTING, Soeren (Universität Bielefeld)

Contribution ID: **31**

Type: **not specified**

Forward dijet production in saturation formalism

Wednesday 29 June 2022 10:20 (25 minutes)

Presenters: KOTKO, Piotr; KOTKO, Piotr (AGH UST)

Contribution ID: 32

Type: **not specified**

Including large x dynamics into Color Glass Condensate

Wednesday 29 June 2022 11:15 (25 minutes)

Presenter: JALILIAN-MARIAN, Jamal

Contribution ID: 33

Type: **not specified**

Exclusive vector meson production at next-to-leading order in the Color Glass Condensate framework

Wednesday 29 June 2022 11:40 (25 minutes)

Presenters: PENTTALA, Jani (University of Jyväskylä (FI)); PENTTALA, Jani

Contribution ID: 34

Type: **not specified**

Numerical challenges of the JIMWLK equation with the kinematical constraint

Wednesday 29 June 2022 12:05 (25 minutes)

Presenters: KORCYL, Piotr (University of Regensburg); KORCYL, Piotr (Jagiellonian University & University Regensburg)

Contribution ID: 35

Type: **not specified**

Discussion: saturation

Wednesday 29 June 2022 12:30 (30 minutes)

Presenters: Prof. TAPIA TAKAKI, Daniel (University of Kansas); IANCU, Edmond (Université Paris-Saclay (FR))

Contribution ID: 36

Type: **not specified**

Saturation effects on nuclear geometry from exclusive vector meson production (remote)

Wednesday 29 June 2022 14:30 (25 minutes)

Presenter: SCHENKE, Bjoern (Brookhaven National Lab)

Contribution ID: 37

Type: **not specified**

Dijet production in DIS at one loop in the CGC (remote)

Wednesday 29 June 2022 14:55 (25 minutes)

Presenters: SALAZAR, Farid (UCLA/UCB/LBNL); SALAZAR, Farid (UCLA/UCB/LBNL); SALAZAR, Farid (Stony Brook University)

Contribution ID: **38**

Type: **not specified**

Evidence for top quark production in nucleus-nucleus collisions with the CMS experiment and future prospects

Wednesday 29 June 2022 15:20 (25 minutes)

Presenter: ALCERRO ALCERRO, Luis (The University of Kansas (US))

Contribution ID: 39

Type: **not specified**

Recent results from LHCf (remote)

Wednesday 29 June 2022 16:15 (25 minutes)

Presenter: BERTI, Eugenio (Universita e INFN, Firenze (IT))

Contribution ID: 40

Type: **not specified**

First approximation of the soft processes in Color Glass Condensate approach (remote)

Wednesday 29 June 2022 16:40 (25 minutes)

Presenters: SANHUEZA, Michael; SANHUEZA, Michael (UTFSM)

Contribution ID: 41

Type: **not specified**

Discussion: saturation

Wednesday 29 June 2022 17:05 (25 minutes)

Presenters: Prof. TAPIA TAKAKI, Daniel (University of Kansas); IANCU, Edmond (Université Paris-Saclay (FR))

Contribution ID: 42

Type: **not specified**

The first experimental observation of odderon exchange (remote)

Thursday 30 June 2022 09:30 (25 minutes)

Presenters: NEMES, Frigyes Janos (CERN (also at Wigner RCP Budapest, Hungary)); NEMES, Frigyes (MTA KFKI)

Contribution ID: 43

Type: **not specified**

New scaling in elastic data

Thursday 30 June 2022 09:55 (25 minutes)

Presenter: ROYON, Christophe (The University of Kansas (US))

Contribution ID: 44

Type: **not specified**

Isolating the Odderon in central production in high energy pA and AA collisions

Thursday 30 June 2022 10:20 (25 minutes)

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

Contribution ID: 45

Type: **not specified**

Odderon contribution: non-linear evolution in the leading twist approximation (remote)

Thursday 30 June 2022 11:15 (25 minutes)

Presenters: SANHUEZA, Michael; SANHUEZA, Michael (UTFSM)

Contribution ID: 46

Type: **not specified**

Hard Diffraction and proton tagging at the LHC

Thursday 30 June 2022 11:40 (25 minutes)

Presenter: PITT, Michael (CERN)

Contribution ID: 47

Type: **not specified**

Diffraction longitudinal structure function at the Electron Ion Collider

Thursday 30 June 2022 12:05 (25 minutes)

Presenters: STASTO, Anna Maria (Pennsylvania State University (US)); STASTO, Anna

Contribution ID: 48

Type: **not specified**

Discussion: hard and soft diffraction

Thursday 30 June 2022 12:30 (30 minutes)

Presenters: STASTO, Anna Maria (Pennsylvania State University (US)); STASTO, Anna; PITT, Michael (CERN); MCNULTY, Ronan (University College Dublin (IE))

Contribution ID: 49

Type: **not specified**

Few Aspects of Hard Diffractive Studies at the LHC

Thursday 30 June 2022 14:30 (25 minutes)

Presenter: TRZEBINSKI, Maciej (Polish Academy of Sciences (PL))

Contribution ID: 50

Type: **not specified**

Multi-peripheral final states at the LHC and conformal spins in hard diffraction (remote)

Thursday 30 June 2022 14:55 (25 minutes)

Presenters: SABIO VERA, Agustin (CERN); SABIO VERA, Agustin; SABIO VERA, Agustin

Contribution ID: 51

Type: **not specified**

Diffractive structure functions in the dipole approach

Presenter: LAPPI, Tuomas

Contribution ID: 52

Type: **not specified**

Diffractive results in CMS

Thursday 30 June 2022 16:15 (25 minutes)

Presenters: MURRAY, Michael; MURRAY, Michael (The University of Kansas (US))

Contribution ID: 53

Type: **not specified**

Gluon dipole and factorization in diffractive DIS

Thursday 30 June 2022 15:20 (25 minutes)

Presenter: TRIANTAFYLLOPOULOS, Dionysios (ECT*/FBK)

Contribution ID: 54

Type: **not specified**

Discussion: diffraction

Thursday 30 June 2022 17:05 (25 minutes)

Presenters: STASTO, Anna Maria (Pennsylvania State University (US)); STASTO, Anna; PITT, Michael (CERN); MCNULTY, Ronan (University College Dublin (IE))

Contribution ID: 55

Type: **not specified**

Review of central exclusive production at LHCb

Friday 1 July 2022 09:30 (25 minutes)

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

Contribution ID: 56

Type: **not specified**

Diffraction exclusive WW, ZZ, ttbar, gamma gamma and ZX production in CMS TOTEM

Friday 1 July 2022 09:55 (25 minutes)

Presenter: ROYON, Christophe (The University of Kansas (US))

Contribution ID: 57

Type: **not specified**

Exclusive production of lepton pairs at the EIC

Thursday 30 June 2022 16:40 (25 minutes)

Presenter: CHWASTOWSKI, Janusz (Polish Academy of Sciences (PL))

Contribution ID: 58

Type: **not specified**

Overview of ATLAS forward proton detectors for LHC Run 3 and plans for the HL-LHC

Friday 1 July 2022 10:20 (25 minutes)

Presenter: LEWICKI, Maciej Piotr (Polish Academy of Sciences (PL))

Contribution ID: 59

Type: **not specified**

Diffraction and exclusive processes in heavy ion collisions with CMS (remote)

Friday 1 July 2022 11:15 (25 minutes)

Presenter: BALDENEGRO BARRERA, Cristian (Laboratoire Leprince-Ringuet)

Contribution ID: **60**

Type: **not specified**

Discussion: gamma gamma physics

Contribution ID: **61**

Type: **not specified**

Modelling W boson pair production with rapidity gaps (remote)

Friday 1 July 2022 12:05 (25 minutes)

Presenters: HARLAND-LANG, Lucian (University of Oxford); HARLAND-LANG, Lucian (Durham University)

Contribution ID: **62**

Type: **not specified**

Open slot

Contribution ID: 63

Type: **not specified**

Discussion: gamma gamma physics and diffraction

Friday 1 July 2022 14:30 (45 minutes)

Presenters: STASTO, Anna Maria (Pennsylvania State University (US)); STASTO, Anna; PITT, Michael (CERN); MCNULTY, Ronan (University College Dublin (IE))

Contribution ID: **64**

Type: **not specified**

End of workshop

Friday 1 July 2022 15:15 (15 minutes)

Presenter: ROYON, Christophe (The University of Kansas (US))

Contribution ID: 65

Type: **not specified**

Hunting for the QCD instantons at the LHC in the forward proton mode

Friday 1 July 2022 11:40 (25 minutes)

Presenter: KHOZE, Valery (University of Durham (GB))

Contribution ID: **66**

Type: **not specified**

Registration

Contribution ID: 67

Type: **not specified**

Discussion

Friday 1 July 2022 12:30 (25 minutes)