Low-x 2019

Report of Contributions

https://indico.cern.ch/e/lowx2019

Contribution ID: **1** Type: **not specified**

Studies of Jet Fragmentation and Hadronisation at LHCb

Studies of Jet Fragmentation and Hadronisation at LHCb

Author: LHCB COLLABORATION

Presenter: LHCB COLLABORATION

Contribution ID: **2** Type: **not specified**

Studies of Central Exclusive Production and Soft QCD phenomena at LHCb

Friday 30 August 2019 11:40 (30 minutes)

The LHCb detector at the LHC offers unique coverage of forward rapidities. This enables complementary measurements of soft QCD phenomena to those at the other LHC detectors. Measurements of the inelastic cross-section and of particle production will be presented. Measurements of Central Exclusive Production (CEP) at LHCb will also be presented. These measurements probe QCD, allowing investigation of the nature of pomerons, and provide constraints on low-x gluon phenomenology, probing potential saturation effects. CEP measurements at LHCb in the most recent LHC run have significantly benefited from the installation of new high rapidity shower counters (the "HeRSCHel"subdetector). The performance and use of this new detector for CEP studies will also be discussed.

Presenter: GIUBEGA, Lavinia-Elena (IFIN-HH (RO))

Contribution ID: **3** Type: **not specified**

V+jets production and Jet cross sections at CMS and tests of QCD

V+jets production and Jet cross sections at CMS and tests of QCD are reviewed.

Author: CMS COLLABORATION

Presenter: CMS COLLABORATION

Contribution ID: **4** Type: **not specified**

Recent PDF results from top physics and heavy flavour results at CMS

Recent PDF results from top physics and heavy flavour results at CMS are reviewed.

Author: CMS COLLABORATION

Presenter: CMS COLLABORATION

Contribution ID: **5** Type: **not specified**

Recent results CMS and TOTEM on exclusive production, light by light scattering and diffraction

Friday 30 August 2019 09:30 (30 minutes)

Recent results CMS and TOTEM on exclusive production, light by light scattering and diffraction are reviewed.

Presenter: ALBROW, Michael (Fermi National Accelerator Lab. (US))

Contribution ID: **6** Type: **not specified**

Recent results on soft and forward physics from CMS

Thursday 29 August 2019 11:30 (30 minutes)

Recent results on soft and forward physics from CMS are reviewed.

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

Contribution ID: **7** Type: **not specified**

Measurements of event properties and correlations in multi jet events in CMS

Monday 26 August 2019 14:30 (30 minutes)

Measurements of event properties and correlations in multi jet events in CMS are reviewed.

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

Contribution ID: **8** Type: **not specified**

Latest results on double parton scattering and MC tuning from CMS

Latest results on double parton scattering and MC tuning from CMS are reviewed.

Author: CMS COLLABORATION

Presenter: CMS COLLABORATION

Contribution ID: **9** Type: **not specified**

Recent results from PPS and PPS status and prospects

This talk describes the present PPS status concerning the detector itself and data taking, as well as future prospects including high lumi.

Author: CMS COLLABORATION

Presenter: CMS COLLABORATION

Contribution ID: **10** Type: **not specified**

Prospects for measurements of H/Z production cross section ratios using CMS Run II data.

We present prospects for the direct measurement of ratios of differential cross sections for the production of Z and Higgs bosons in proton-proton collisions, using data taken by CMS during the LHC Run II. The aim of the measurement is to study soft and hard gluon emission in the initial state for Higgs and Z production mechanisms. Hence, we focus on variables known to be sensitive to the production mechanisms of heavy bosons: jet multiplicity, transverse momenta of the boson and leading jet, and momentum balance in the transverse plane. We use Monte-Carlo samples to study the feasibility of the measurement and estimate the expected precision.

Author: BILIN, Bugra (Universite Libre de Bruxelles (BE))

Presenter: BILIN, Bugra (Universite Libre de Bruxelles (BE))

Contribution ID: **11** Type: **not specified**

The TOTEM data at roots = 13 TeV and the enigma of the odderon

We demonstrate that a model based on CGC/saturation approach, successfully describes soft interaction collisions for a wide energy range of W = 30 GeV to 13 TeV, including the new TOTEM data at 13 TeV. Incorporating the secondary Reggeons in our approach enables us to describe the complete set of soft data, including the energy behaviour of ρ, the ratio of the real to the imaginary parts of the elastic scattering amplitude. We argue that it is premature to claim that an odderon contribution is necessary, and estimate its possible contribution as 1 mb to the real part of the amplitude at W = 13 TeV. We show that the odderon contribution depends on the value of the energy, leading to Re A(s,t =0) = 8 mb, at W =21.3 GeV. Bearing this in mind, we do not believe that ρ at high energy is the appropriate observable for detecting the odderon contribution.

Authors: Prof. GOTSMAN, Errol (Tel Aviv University); Prof. LEVIN, Evgeny (Tel Aviv University); Dr POTASHNIKOVA, Irina (Departemento de Fisica, Universidad Tecnica Fedrico Santa Maria ,Valparaiso, Chile)

Presenter: Prof. GOTSMAN, Errol (Tel Aviv University)

Contribution ID: **12** Type: **not specified**

Studies of Central Exclusive Production and Soft QCD phenomena at LHCb

The LHCb detector at the LHC offers unique coverage of forward rapidities. This enables complementary measurements of soft QCD phenomena to those at the other LHC detectors. Measurements of the inelastic cross-section and of particle production will be presented. Measurements of Central Exclusive Production (CEP) at LHCb will also be presented. These measurements probe QCD, allowing investigation of the nature of pomerons, and provide constraints on low-x gluon phenomenology, probing potential saturation effects. CEP measurements at LHCb in the most recent LHC run have significantly benefited from the installation of new high rapidity shower counters (the "HeRSCHel"subdetector). The performance and use of this new detector for CEP studies will also be discussed.

Author: Mrs GIUBEGA, Lavinia-Elena (IFIN-HH (RO))

Presenter: Mrs GIUBEGA, Lavinia-Elena (IFIN-HH (RO))

Contribution ID: **13** Type: **not specified**

Forward jet cross sections: from trijet to NLO dijet

Monday 26 August 2019 16:40 (25 minutes)

Using the formalism of the light-cone wave function in pQCD together with the hybrid factorization, we compute the cross-section for two and three particle production at forward rapidities in proton-nucleus collisions. We focus on the quark channel, in which the three produced partons – a quark accompanied by a gluon pair, or two quarks plus one antiquark – are all generated via two successive splittings starting with a quark that was originally collinear with the proton. The produced partons are put on-shell by their scattering off the nuclear target, described as a Lorentz-contracted "shockwave". By using the three-parton component of the quark light-cone wave function, together with the virtual corrections, we can then present our progress on the computation of the next-to-leading order correction to the cross-section for the production of a pair of jets.

Authors: MULIAN, Yair; IANCU, Edmond (Université Paris-Saclay (FR))

Presenter: MULIAN, Yair

Contribution ID: **14** Type: **not specified**

Vertices of three reggeized gluons and the unitarity corrections to the propagator of reggeized gluons

Tuesday 27 August 2019 16:10 (25 minutes)

High energy QCD hadronic interactions in the Regge kinematics, when the transferred transverse momenta are much smaller than an energies of colliding particles, can be described by the interaction of gluons with reggeized ones ("reggeized gluons", reggeons). The description of these processes was firstly introduced in series of L.N. Lipatov's papers. Calculations of the amplitudes of different scattering processes in this approach reveal also a so-called multi-Regge structure of the amplitudes. Therefore, in order to analyze different scattering processes with multi-Regge kinematics, L.Lipatov proposed an effective action based on QCD properties at high energy.

We develop the effective action formalism, see \cite{1,2,3,4,5,6} , based on the reggeized gluons as the main degrees of freedom, which can be considered as a reformulation of the RFT (Regge field theory) calculus for the case of high-energy QCD. The perturbation theory is based on the knowledge of the classical solutions of equations of motion and loops contributions to effective action.

Our main goal in this study is to obtain unitarity corrections to amplitudes. The unitarity corrections to the propagator of reggeized gluons calculated in the framework of QCD RFT require a knowledge of the expressions for reggeon propagator and vertices of the interaction of three reggeons to one QCD loop precision. In the last paper \cite{6}, we calculated the vertex of interactions of $A_+A_+A_-$ Reggeon fields to this precision. We demonstrated, that all loop leading logarithmic order contributions to the vertex can be summed through the integro-differential equation similar to the BFKL one.

\renewcommand\bibsection{\nsection{References}}

\begin{thebibliography}{4}

\bibitem{1}
S.Bondarenko, L.Lipatov, S.Pozdnyakov, A.Prygarin. One loop light-cone QCD, effective action for reggeized gluons and QCD RFT calculus (2017) //
Eur. Phys. J. 2017. Vol. {\bf C77}:630.

\bibitem{2}
S.Bondarenko, S.S.Pozdnyakov (2018). NNLO classical solution for Lipatov's effective action for reggeized gluons // Submitted to Int.J.Mod.Phys. A, arXiv:1802.05508

%\cite{Bondarenko:2018kqs}
\bibitem{3}
S.Bondarenko, S.S.Pozdnyakov (2018). S-matrix and productions amplitudes in high energy QCD //
Phys.Lett. B783 207-211
%%CITATION = ARXIV:1803.04131;%%

\bibitem{4}
S. Bondarenko, S.S. Pozdnyakov (2018). On correlators of Reggeon fields and operators of Wilson lines in high energy QCD, Int.J.Mod.Phys. A33 (2018) no.35, 1850204\\

\bibitem{5}
S. Bondarenko and S. Pozdnyakov (2018). On QCD RFT corrections to the propagator of reggeized gluons, arXiv:1903.11288 [hep-th]\\

\bibitem{6}

S. Bondarenko and S. Pozdnyakov. On reggeization of vertex of three reggeized gluons in high energy QCD,
arXiv:1905.04916 [hep-ph].
%%CITATION = ARXIV:1905.04916;%%

\end{thebibliography}

Authors: BONDARENKO, Sergey (Ariel University); POZDNYAKOV, Semyon (Saint Petersburg State University, Ariel University)

Presenter: POZDNYAKOV, Semyon (Saint Petersburg State University, Ariel University)

Contribution ID: **15** Type: **not specified**

Initial-state fluctuations and anisotropies in heavy-ion collisions

blah blah

Author: MARQUET, Cyrille (CPHT - Ecole Polytechnique)

Presenter: MARQUET, Cyrille (CPHT - Ecole Polytechnique)

Contribution ID: **16** Type: **not specified**

Sudakov resummation in the CGC framework

Tuesday 27 August 2019 14:50 (25 minutes)

In this talk we would like to present our recent works on how to incorporate Sudakov resummation into the dilute-dense factorization framework.

Author: Dr WEI, Shu-yi (CPHT, Ecole Polytechnique)

Presenter: Dr WEI, Shu-yi (CPHT, Ecole Polytechnique)

Contribution ID: **17** Type: **not specified**

BFKL Resummation in the inclusive Higgs Boson Plus Jet production at the LHC

Monday 26 August 2019 17:30 (25 minutes)

The inclusive production of a Higgs boson and of a jet at the LHC, featuring a wide separation in rapidity, is an interesting probe process for the investigation of the BFKL mechanism of resummation of energy logarithms in the QCD perturbative series. Here, we present for the first time a partial next-to-leading order BFKL analysis for cross sections and azimuthal correlations.

Authors: CELIBERTO, Francesco Giovanni (Universit di Pavia & INFN - Sezione di Pavia, I-27100 Pavia, Italy); MOHAMMED, Mohammed Maher Abdelrahim (Università della Calabria and INFN - Gruppo collegato di Cosenza); PAPA, Alessandro (Università della Calabria and INFN - Gruppo collegato di Cosenza)

Presenter: MOHAMMED, Mohammed Maher Abdelrahim (Università della Calabria and INFN - Gruppo collegato di Cosenza)

Contribution ID: **18** Type: **not specified**

Low x physics and saturation in terms of TMD distributions

Monday 26 August 2019 11:40 (25 minutes)

One of the main difficulties to understand the continuity between low x physics and more standard QCD factorization frameworks which apply for more moderate energies is the very nature of the parton distributions involved. I will argue that low x physics can be understood as the eikonal limit of an infinite twist TMD distribution framework, and discuss the consequences of this observation for saturation and for gluon polarizations at small x.

Authors: ALTINOLUK, Tolga (National Centre for Nuclear Research); KOTKO, Piotr (Penn State University); BOUSSARIE, Renaud (Brookhaven National Lab)

Presenter: BOUSSARIE, Renaud (Brookhaven National Lab)

Contribution ID: **19** Type: **not specified**

Correlations at unequal rapidity in the dilute limit of JIMWLK

Tuesday 27 August 2019 09:55 (25 minutes)

Unequal rapidity correlations can be studied within the stochastic Langevin picture of JIMWLK evolution in the Colour Glass Condensate effective field theory. By evolving the classical field in the direct and complex conjugate amplitudes, the Langevin formalism can be used to study two-particle production at large rapidity separations. The evolution between the rapidities of the two produced particles can be expressed as a linear equation, even in the full nonlinear limit. In addition, the Langevin formalism for two-particle correlations reduces to a BFKL picture in the dilute limit and in momentum space, providing an interpretation of BFKL evolution as a stochastic process for colour charges.

Authors: RAMNATH, Andrecia (University of Jyvaskyla); LAPPI, Tuomas (University of Jyvaskyla)

Presenter: RAMNATH, Andrecia (University of Jyvaskyla)

Contribution ID: **20** Type: **not specified**

LHCf forward physics results

Thursday 29 August 2019 12:00 (30 minutes)

The main aim of the LHC forward (LHCf) experiment is to provide precise measurements of the particles production spectra in the forward region of the hadronic collisions. These high energy calibration data are very important for the tuning of hadronic interaction models used by ground-based cosmic rays experiments. LHC is the best place where we can perform these measurements, because proton-proton collisions at √s = 14 TeV is equivalent to the interaction of a 10ˆ17 eV cosmic ray with the atmosphere.
LHCf makes use of two small sampling calorimeters installed at ±140 m from LHC IP1, so that it can detect neutral particles produced by p-p and p-ion collisions with pseudo-rapidity η > 8.4.
In the past years, LHCf acquired data in p-p and p-ion collisions at different energies (p-p at √s = 0.9, 2.76, 7 and 13 TeV; p-Pb at √sNN = 5.02 and 8.1 TeV). In this talk, we will present the analysis results published by the collaboration, relative to neutrons, photons and π0 production spectra, compared with models predictions.
We will also present some preliminary results relative to the ATLAS-LHCf common analysis, from which we expect to significantly increase the impact of LHCf measurements, discriminating between diffractive and non- diffractive events by the use of ATLAS information in the central region.
A short overview of the future activities foreseen at the LHC-Run3 (14 TeV p-p and p-O runs) will also be given.

Author: ADRIANI, Oscar (Dipartimento di Fisica)

Presenter: ADRIANI, Oscar (Dipartimento di Fisica)

Contribution ID: **21** Type: **not specified**

Welcome

Monday 26 August 2019 08:45 (15 minutes)

Presenters: ROYON, Christophe (The University of Kansas (US)); PTOCHOS, Fotios (University of Cyprus (CY))

Contribution ID: **22** Type: **not specified**

Latest results on double parton scattering and MC tuning from CMS

Monday 26 August 2019 09:00 (30 minutes)

Presenter: ZLEBCIK, Radek (Deutsches Elektronen-Synchrotron (DE))

Contribution ID: **23** Type: **not specified**

Measurements of multi-parton interactions at ATLAS

Monday 26 August 2019 09:30 (30 minutes)

Presenter: ZENIS, Tibor (Comenius University (SK))

Contribution ID: **24** Type: **not specified**

J/\psi production in hadron scattering: two parton showers contribution

Monday 26 August 2019 10:00 (25 minutes)

Presenter: LEVIN, Eugene (Tel Aviv University)

Contribution ID: **25** Type: **not specified**

Impact parameter dependence of colinearly improved Balitsky-Kovchegov evolution

Monday 26 August 2019 17:05 (25 minutes)

Presenter: MATAS, Marek (CERN)

Contribution ID: **26** Type: **not specified**

Discussion session: DPS, saturation

Monday 26 August 2019 12:05 (35 minutes)

Presenters: FOSTER, Brian (University of Oxford (GB)); COLFERAI, Dimitri; LEVIN, Eugene (Tel Aviv University)

Contribution ID: **27** Type: **not specified**

Forward photon measurements with ALICE at the LHC as a probe for low-x gluons

Monday 26 August 2019 14:00 (30 minutes)

Presenter: PEITZMANN, Thomas (Nikhef National institute for subatomic physics (NL))

Contribution ID: **28** Type: **not specified**

The NL BFKL vertex for Mueller-Tang jets in the soft-gluon approximation

Monday 26 August 2019 16:15 (25 minutes)

Presenter: COLFERAI, Dimitri

Contribution ID: **29** Type: **not specified**

Sudakov resummation in the CGC framework

Presenter: WEI, Shu-yi (CPHT, Ecole Polytechnique)

Contribution ID: **30** Type: **not specified**

Mueller Tang cross sectiona at NLL

Monday 26 August 2019 15:00 (25 minutes)

Presenter: DEGANUTTI, Federico

Contribution ID: **31** Type: **not specified**

Discussion session: jet gap jets, BFKL saturation

Monday 26 August 2019 17:55 (35 minutes)

Presenters: COLFERAI, Dimitri; LEVIN, Eugene (Tel Aviv University)

Contribution ID: **32** Type: **not specified**

Recent PDF results from top physics and heavy flavour results at CMS

Tuesday 27 August 2019 09:00 (30 minutes)

Presenter: WICHMANN, Katarzyna (Deutsches Elektronen-Synchrotron (DE))

Contribution ID: **33** Type: **not specified**

BFKL resummation in inclusive processes

Monday 26 August 2019 11:15 (25 minutes)

Presenter: PAPA, Alessandro (Universita‘ della Calabria & INFN-Cosenza)

Contribution ID: **34** Type: **not specified**

Regge cuts in the Reggeized gluon channel

Monday 26 August 2019 10:50 (25 minutes)

Presenter: FADIN, Victor (Budker Institute of Nuclear Physics)

Contribution ID: **35** Type: **not specified**

Introduction to XFitter

Tuesday 27 August 2019 10:20 (25 minutes)

Presenter: WICHMANN, Katarzyna (Deutsches Elektronen-Synchrotron (DE))

Contribution ID: **36** Type: **not specified**

Determination of proton parton distribution functions using ATLAS data

Tuesday 27 August 2019 11:35 (30 minutes)

Presenter: BELLAGAMBA, Lorenzo (Universita e INFN, Bologna (IT))

Contribution ID: **37** Type: **not specified**

Discussion session: PDFs, DGLAP...

Tuesday 27 August 2019 12:05 (35 minutes)

Presenters: FOSTER, Brian (University of Oxford (GB)); WICHMANN, Katarzyna (Deutsches Elektronen-Synchrotron (DE)); MOTYKA, Leszek

Contribution ID: **38** Type: **not specified**

Prospects for measurements of H/Z production cross section ratios using CMS Run II data

Tuesday 27 August 2019 14:00 (25 minutes)

Presenter: MOUREAUX, Louis (Universite Libre de Bruxelles (BE))

Contribution ID: **39** Type: **not specified**

Initial-state fluctuations and anisotropies in heavy-ion collisions

Tuesday 27 August 2019 14:25 (25 minutes)

Presenters: MARQUET, Cyrille (Theory Division - CERN); MARQUET, Cyrille (CPHT - Ecole Polytechnique); MARQUET, Cyrille Michel (Universidade de Santiago de Compostela (ES))

Contribution ID: **40** Type: **not specified**

Recent results on photon-photon, photo-nuclear, and heavy-ion collisions from ATLAS at the LHC

Contribution ID: **41** Type: **not specified**

Thermal radiation and inclusive production in the CGC/saturation approach at high energies for hadron-hadron and ion-ion collision

Tuesday 27 August 2019 15:15 (25 minutes)

Presenter: LEVIN, Eugene (Tel Aviv University)

Contribution ID: **42** Type: **not specified**

UPC results from ALICE

Tuesday 27 August 2019 16:35 (30 minutes)

Presenter: LAVICKA, Roman (Czech Technical University (CZ))

Contribution ID: **43** Type: **not specified**

Topological charge fluctuations in the Glasma

Monday 26 August 2019 15:25 (25 minutes)

Presenter: GUERRERO RODRÍGUEZ, Pablo (UGR)

Contribution ID: **44** Type: **not specified**

Discussion session: Heavy ions

Tuesday 27 August 2019 17:05 (1 hour)

Presenter: MARQUET, Cyrille (CPHT - Ecole Polytechnique)

Contribution ID: **45** Type: **not specified**

V+jets production and Jet cross sections at CMS and tests of QCD

Thursday 29 August 2019 09:00 (30 minutes)

Presenter: BILIN, Bugra (Universite Libre de Bruxelles (BE))

Contribution ID: **46** Type: **not specified**

NNLO QCD fits to jets and extraction of alpha_s

Thursday 29 August 2019 09:30 (30 minutes)

Presenter: WICHMANN, Katarzyna (Deutsches Elektronen-Synchrotron (DE))

Contribution ID: **47** Type: **not specified**

Measurements of single diffraction using forward proton tagging at ATLAS

Thursday 29 August 2019 10:00 (30 minutes)

Presenter: STASZEWSKI, Rafał (IFJ PAN Cracow (PL))

Contribution ID: **48** Type: **not specified**

Diffractive PDF determination from HERA inclusive and jet data at NNLO QCD

Thursday 29 August 2019 11:00 (30 minutes)

Presenter: ZLEBCIK, Radek (Deutsches Elektronen-Synchrotron (DE))

Contribution ID: **49** Type: **not specified**

Discussion session: inclusive diffraction

Thursday 29 August 2019 12:30 (30 minutes)

Presenters: ALBROW, Michael (Fermi National Accelerator Lab. (US)); STASZEWSKI, Rafał (IFJ PAN Cracow (PL))

Contribution ID: **50** Type: **not specified**

Multiple scattering effects in heavy quarkonia hadroproduction

Tuesday 27 August 2019 09:30 (25 minutes)

Presenter: MOTYKA, Leszek

Contribution ID: **51** Type: **not specified**

Recent results from PPS and PPS status and prospects

Friday 30 August 2019 09:00 (30 minutes)

Presenter: BELLORA, Andrea (Universita e INFN Torino (IT))

Contribution ID: **52** Type: **not specified**

Anomalous coupling studies and the pomeron structure at the LHC

Friday 30 August 2019 10:00 (25 minutes)

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

Contribution ID: **53** Type: **not specified**

Axion-like particles in light-by-light scattering in pp, pPb, and Ar-Ar collisions

Friday 30 August 2019 10:50 (25 minutes)

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

Contribution ID: **54** Type: **not specified**

Searches for Dark Matter at the LHC in forward proton mode

Friday 30 August 2019 11:15 (25 minutes)

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

Contribution ID: **55** Type: **not specified**

Discussion session: exclusive diffraction

Friday 30 August 2019 12:10 (35 minutes)

Presenters: ROYON, Christophe (The University of Kansas (US)); KHOZE, Valery (University of Durham (GB))

Contribution ID: **56** Type: **not specified**

Review of TOTEM results

Friday 30 August 2019 14:00 (30 minutes)

Presenter: KASPAR, Jan (Acad. of Sciences of the Czech Rep. (CZ))

Contribution ID: **57** Type: **not specified**

Scaling properties of elastic pp and ppbar scattering at LHC energies

Friday 30 August 2019 14:30 (25 minutes)

Presenter: CSORGO, Tamas (Hungarian Academy of Sciences (HU))

Contribution ID: **58** Type: **not specified**

Photon-induced processes in production of heavy particle pairs at the LHC

Friday 30 August 2019 14:55 (25 minutes)

Presenter: LUSZCZAK, Marta (University of Rzeszow)

Contribution ID: **59** Type: **not specified**

Results on Total and Elastic Cross Sections in p+p collisions at sqrt(s) = 200 GeV with the STAR Detector at RHIC

Friday 30 August 2019 15:50 (30 minutes)

Presenter: Dr GURYN, Wlodek (Brookhaven National Laboratory)

Contribution ID: **60** Type: **not specified**

Roman pots and the impact parameter for ion-ion

Friday 30 August 2019 16:20 (25 minutes)

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

Contribution ID: **61** Type: **not specified**

Recent results on central exclusive production within the tensor-pomeron and vector-odderon approach

Friday 30 August 2019 16:45 (25 minutes)

Presenter: LEBIEDOWICZ, Piotr (Institute of Nuclear Physics PAN)

Contribution ID: **62** Type: **not specified**

Discussion session: Soft and hard diffraction

Friday 30 August 2019 17:10 (50 minutes)

Presenters: CSORGO, Tamas (Hungarian Academy of Sciences (HU)); AVATI, Valentina (AGH University of Science and Technology (PL))

Contribution ID: **63** Type: **not specified**

Closing items

Friday 30 August 2019 18:00 (10 minutes)

Presenters: ROYON, Christophe (The University of Kansas (US)); PTOCHOS, Fotios (University of Cyprus (CY))

Contribution ID: **64** Type: **not specified**

xFitter project - a framework for QCD studies

Tuesday 27 August 2019 11:10 (25 minutes)

Presenter: LUSZCZAK, Agnieszka