

QCD Evolution Workshop 2021

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome

Monday 10 May 2021 09:30 (5 minutes)

Presenter: BERN, Zvi (UCLA)

Session Classification: QCD

Contribution ID: 2

Type: **not specified**

Milestones of evolution

Monday 10 May 2021 09:40 (25 minutes)

Author: STERMAN, George (Stony Brook University)

Presenter: STERMAN, George (Stony Brook University)

Session Classification: QCD

Contribution ID: 3

Type: **not specified**

Jets and Longitudinal Proton Structure at the EIC

Monday 10 May 2021 10:05 (25 minutes)

Presenter: BOUGHEZAL, Radja (Argonne)

Session Classification: QCD

Contribution ID: 4

Type: **not specified**

QCD Resummation for Jet Observables at Colliders

Monday 10 May 2021 10:30 (25 minutes)

Presenter: YUAN, Feng (Lawrence Berkeley National Laboratory)

Session Classification: QCD

Contribution ID: 5

Type: **not specified**

Projections of jet measurements at the EIC and recent HERA results

Monday 10 May 2021 10:55 (25 minutes)

Presenter: ARRATIA, Miguel (University of California, Riverside)

Session Classification: QCD

Contribution ID: 6

Type: **not specified**

Overview of recent HERMES results on transverse-momentum dependent spin asymmetries

Monday 10 May 2021 11:50 (25 minutes)

Presenter: SCHNELL, Gunar (University of the Basque Country & IKERBASQUE)

Session Classification: QCD

Contribution ID: 7

Type: **not specified**

Sivers and Qiu-Sterman functions from SIDIS and Drell-Yan data

Monday 10 May 2021 12:15 (25 minutes)

Presenter: ALEXEY, Vladimirov (Regensburg University)

Session Classification: QCD

Contribution ID: 8

Type: **not specified**

Reweighting the quark Sivers function with STAR jet data

Monday 10 May 2021 12:40 (25 minutes)

Presenter: FLORE, Carlo (IJCLab Orsay)

Session Classification: QCD

Contribution ID: 9

Type: **not specified**

Gluon TMDs and J/ ψ polarization in e p collisions

Monday 10 May 2021 13:05 (25 minutes)

Presenter: PISANO, Cristian

Session Classification: QCD

Contribution ID: 10

Type: **not specified**

Measurement of the Drell-Yan transverse momentum dependence over a wide mass range from CMS

Monday 10 May 2021 14:00 (25 minutes)

Presenter: MOUREAUX, Louis

Session Classification: QCD

Contribution ID: 11

Type: **not specified**

TMD Parton Distributions up to N3LL from Drell-Yan data

Monday 10 May 2021 14:25 (25 minutes)

Presenter: BOZZI, Giuseppe (University of Pavia)

Session Classification: QCD

Contribution ID: 12

Type: **not specified**

Factorization & Resummation of Fiducial Power Corrections

Monday 10 May 2021 15:15 (25 minutes)

Presenter: MICHEL, Johannes K. L. (MIT CTP)

Session Classification: QCD

Contribution ID: 13

Type: **not specified**

Renormalization schemes for parton densities

Monday 10 May 2021 15:40 (25 minutes)

Presenter: ROGERS, Ted (Old Dominion University/Jefferson Lab)

Session Classification: QCD

Contribution ID: 14

Type: **not specified**

Using TMD formalism for predictions of the W and Z spectrum

Monday 10 May 2021 14:50 (25 minutes)

Presenter: SCIMEMI, ignazio (Unniiversidad Complutense Madrid)

Session Classification: QCD

Contribution ID: 15

Type: **not specified**

Recent Progress in Large-Momentum Effective Theory

Tuesday 11 May 2021 09:30 (25 minutes)

Presenter: Ji, Xiangdong (University of Maryland)

Session Classification: QCD

Contribution ID: 16

Type: **not specified**

QCD factorization for twist-three quasi(pseudo) parton distributions

Tuesday 11 May 2021 09:55 (25 minutes)

Presenter: BRAUN, Vladimir (Regensburg University)

Session Classification: QCD

Contribution ID: 17

Type: **not specified**

Precision calculation of the x-dependence of PDFs from lattice QCD

Tuesday 11 May 2021 10:20 (25 minutes)

Presenter: Dr ZHAO, Yong (Brookhaven National Laboratory)

Session Classification: QCD

Contribution ID: **18**

Type: **not specified**

Determination of the Collins-Soper Kernel from Lattice QCD

Tuesday 11 May 2021 10:45 (25 minutes)

Presenter: SCHLEMMER, Maximilian (University of Regensburg)

Session Classification: QCD

Contribution ID: 19

Type: **not specified**

Recent Progress in Lattice Parton Distribution Calculations

Tuesday 11 May 2021 11:40 (25 minutes)

Presenter: Prof. LIN, Huey-Wen (Michigan State University)

Session Classification: QCD

Contribution ID: 20

Type: **not specified**

x-dependent GPDs from Lattice QCD

Tuesday 11 May 2021 12:05 (25 minutes)

Presenter: CONSTANTINO, Martha (Temple University)

Session Classification: QCD

Contribution ID: 21

Type: **not specified**

Valence PDF of pion from lattice QCD

Tuesday 11 May 2021 12:30 (25 minutes)

Presenter: MUKHERJEE, Swagato (BNL)

Session Classification: QCD

Contribution ID: 22

Type: **not specified**

Gluon distribution from lattice QCD

Tuesday 11 May 2021 12:55 (25 minutes)

Presenter: SUFIAN, Raza (Jefferson Lab)

Session Classification: QCD

Contribution ID: 23

Type: **not specified**

Transverse spin sum rule

Tuesday 11 May 2021 13:50 (25 minutes)

Presenter: LORCÉ, Cédric (Ecole Polytechnique)

Session Classification: QCD

Contribution ID: 24

Type: **not specified**

Twist-3 GPDs and Orbital Angular Momentum

Tuesday 11 May 2021 14:15 (25 minutes)

Presenter: Dr SHIELLS, Kyle (Center for Nuclear Femtography)

Session Classification: QCD

Contribution ID: 25

Type: **not specified**

Exclusive massive photon-pair production in meson-baryon collisions

Tuesday 11 May 2021 14:40 (20 minutes)

Presenter: YU, Zhite (Michigan State University)

Session Classification: QCD

Contribution ID: 26

Type: **not specified**

Lorentz Invariance and Equation of Motion Relations for polarized GTMDs and Angular Momentum

Tuesday 11 May 2021 15:00 (20 minutes)

Presenter: ENGELHARDT, Michael (New Mexico State University)

Session Classification: QCD

Contribution ID: 27

Type: **not specified**

Two-loop coefficient function for DVCS: Vector contributions

Tuesday 11 May 2021 15:20 (20 minutes)

Presenter: SCHÖNLEBER, Jakob (University of Regensburg)

Session Classification: QCD

Contribution ID: 28

Type: **not specified**

Revisiting GPD evolution equations

Tuesday 11 May 2021 15:40 (20 minutes)

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

Session Classification: QCD

Contribution ID: 29

Type: **not specified**

GPDs of the pion in LF holographic model

Presenter: DAHIYA, Harleen (Dr. B.R. Ambedkar National Institute of Technology, Jalandhar)

Session Classification: QCD

Contribution ID: **30**

Type: **not specified**

Update on helicity at small x

Wednesday 12 May 2021 09:30 (20 minutes)

Presenter: KOVCHEGOV, Yuri (The Ohio State University)

Session Classification: QCD

Contribution ID: 31

Type: **not specified**

Single Logarithmic Contribution to Small-x Helicity Evolution

Wednesday 12 May 2021 09:50 (15 minutes)

Presenter: TAWABUTR, Yossathorn (The Ohio State University)

Session Classification: QCD

Contribution ID: 32

Type: **not specified**

Quark Sivers Function at Small-x: Return of a Spin-Dependent Odderon

Wednesday 12 May 2021 10:05 (15 minutes)

Presenter: SANTIAGO, Melvin (Ohio State University)

Session Classification: QCD

Contribution ID: 33

Type: **not specified**

High-energy OPE for polarized DIS

Wednesday 12 May 2021 10:20 (25 minutes)

Presenter: CHIRILLI, Giovanni Antonio (University of Regensburg)

Session Classification: QCD

Contribution ID: 34

Type: **not specified**

Threshold resummation in forward hadron production

Wednesday 12 May 2021 10:45 (25 minutes)

Presenter: LIU, xiaohui

Session Classification: QCD

Contribution ID: 35

Type: **not specified**

Towards a unification of gluon distributions at small and moderate x

Wednesday 12 May 2021 11:40 (25 minutes)

Presenter: Dr MEHTAR-TANI, Yacine (Brookhaven National Laboratory)

Session Classification: QCD

Contribution ID: 36

Type: **not specified**

ITMD factorization and its recent applications

Wednesday 12 May 2021 12:05 (25 minutes)

Presenter: KUTAK, Krzysztof (Institute of Nuclear Physics Polish Academy of Sciences)

Session Classification: QCD

Contribution ID: 37

Type: **not specified**

Small-x dijet/dihadron production the EIC: beyond the TMD factorization and progress towards NLO

Wednesday 12 May 2021 12:30 (25 minutes)

Presenter: SALAZAR, Farid (Stony Brook University)

Session Classification: QCD

Contribution ID: 38

Type: **not specified**

Forward dijets in proton-nucleus collisions at next-to-leading order: the real corrections

Wednesday 12 May 2021 12:55 (25 minutes)

Presenter: MULLAN, Yair (University of Jyväskylä)

Session Classification: QCD

Contribution ID: 39

Type: **not specified**

Gauge-invariant TMD factorization for Drell-Yan hadronic tensor at small-x

Wednesday 12 May 2021 13:50 (25 minutes)

Presenter: BALITSKY, Ian (JLab/ODU)

Session Classification: QCD

Contribution ID: 40

Type: **not specified**

Evolution with transverse momentum dependent splitting functions

Wednesday 12 May 2021 14:15 (25 minutes)

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

Session Classification: QCD

Contribution ID: 41

Type: **not specified**

Exclusive Double Drell-Yan factorization and GTMDs

Wednesday 12 May 2021 14:40 (25 minutes)

Presenter: GUTIERREZ, Patricia

Session Classification: QCD

Contribution ID: 42

Type: **not specified**

JIMWLK Evolution, Lindblad Equation and Quantum-Classical Correspondence

Wednesday 12 May 2021 15:05 (25 minutes)

Presenter: LI, Ming (North Carolina State University)

Session Classification: QCD

Contribution ID: 43

Type: **not specified**

Entanglement, partial set of measurements, and diagonality of the density matrix in the parton model

Wednesday 12 May 2021 15:30 (25 minutes)

Presenter: SKOKOV, Vladimir (BNL)

Session Classification: QCD

Contribution ID: 44

Type: **not specified**

Leading jets and energy loss

Thursday 13 May 2021 09:30 (25 minutes)

Presenter: RINGER, Felix (UC Berkeley/LBNL)

Session Classification: QCD

Contribution ID: 45

Type: **not specified**

Rethinking Jets with the Lightray OPE

Thursday 13 May 2021 09:55 (25 minutes)

Presenter: MOULT, Ian

Session Classification: QCD

Contribution ID: 46

Type: **not specified**

The Time-reversal Odd Side of a Jet

Thursday 13 May 2021 10:20 (25 minutes)

Presenter: XING, Hongxi (South China Normal University)

Session Classification: QCD

Contribution ID: 47

Type: **not specified**

Azimuthal decorrelation in V+jet production with the WTA axis

Thursday 13 May 2021 10:45 (25 minutes)

Presenter: RAHN, Rudi (University of Amsterdam)

Session Classification: QCD

Contribution ID: 48

Type: **not specified**

The track functions and their QCD evolution

Thursday 13 May 2021 11:40 (25 minutes)

Presenter: WAALEWIJN, Wouter (University of Amsterdam)

Session Classification: QCD

Contribution ID: 49

Type: **not specified**

Two-loop splitting in double parton distributions: the colour non-singlet case

Thursday 13 May 2021 12:05 (25 minutes)

Presenter: PLÖSSL, Peter (DESY)

Session Classification: QCD

Contribution ID: 50

Type: **not specified**

Two-loop evolution equation for the B-meson distribution amplitude

Thursday 13 May 2021 12:30 (25 minutes)

Presenter: JI, Yao (University of Siegen)

Session Classification: QCD

Contribution ID: 51

Type: **not specified**

Energy-energy correlators in DIS (as a probe to TMDPDFs)

Thursday 13 May 2021 12:55 (25 minutes)

Presenter: MAKRIS, Yiannis (INFN PAVIA)

Session Classification: QCD

Contribution ID: 52

Type: **not specified**

Probing the Quark Gluon Plasma with jets

Thursday 13 May 2021 13:50 (25 minutes)

Presenter: VAIDYA, varun (LANL)

Session Classification: QCD

Contribution ID: 53

Type: **not specified**

Effects of Non-Gaussian in-medium transverse momentum broadening on di-jet observables

Thursday 13 May 2021 14:15 (25 minutes)

Presenter: ROHRMOSER, Martin (Institute of Nuclear Physics, Polish Academy of Sciences)

Session Classification: QCD

Contribution ID: 54

Type: **not specified**

Recent updates from JAM collaboration

Thursday 13 May 2021 14:40 (10 minutes)

Presenter: SATO, nobuo (Jefferson Lab)

Session Classification: QCD

Contribution ID: 55

Type: **not specified**

Gluon helicity distributions

Thursday 13 May 2021 14:50 (10 minutes)

Presenter: ZHOU, Yiyu

Session Classification: QCD

Contribution ID: 56

Type: **not specified**

Extractions of Collinear and TMD Parton Distributions in the Pion

Thursday 13 May 2021 15:10 (10 minutes)

Presenter: BARRY, Patrick (Jefferson Lab)

Session Classification: QCD

Contribution ID: 57

Type: **not specified**

Small-x Helicity Phenomenology

Thursday 13 May 2021 15:20 (10 minutes)

Presenter: ADAMIAK, Daniel

Session Classification: QCD

Contribution ID: 58

Type: **not specified**

Phenomenological Study of the Origin of SSAs and Extraction of the Tensor Charge

Thursday 13 May 2021 15:30 (10 minutes)

Presenter: PITONYAK, Daniel (Lebanon Valley College)

Session Classification: QCD

Contribution ID: 59

Type: **not specified**

TMDs for spin-1 hadrons

Friday 14 May 2021 09:30 (25 minutes)

Presenter: KUMANO, Shunzo (KEK)

Session Classification: QCD

Contribution ID: 60

Type: **not specified**

Space-Time Reciprocity Relations and Fragmentation

Friday 14 May 2021 09:55 (25 minutes)

Presenter: NEILL, Duff (LANL)

Session Classification: QCD

Contribution ID: 61

Type: **not specified**

Phenomenological extraction of a universal TMD FF from BELLE single hadron production data

Friday 14 May 2021 10:20 (25 minutes)

Presenter: BOGLIONE, Mariaelena (University of Turin)

Session Classification: QCD

Contribution ID: 62

Type: **not specified**

Hadron production in e+e- collisions within the helicity formalism and the Λ polarizing FF

Friday 14 May 2021 10:45 (25 minutes)

Presenter: Prof. D'ALESIO, Umberto (University and INFN Cagliari)

Session Classification: QCD

Contribution ID: 63

Type: **not specified**

Gravitational Form Factors and Mechanical Properties of the Proton in a Diquark Model

Friday 14 May 2021 11:10 (25 minutes)

Presenter: Dr MUKHERJEE, Asmita (IIT Bombay)

Session Classification: QCD

Contribution ID: 64

Type: **not specified**

Accessing the neutron charge radius through electron scattering

Friday 14 May 2021 12:05 (25 minutes)

Presenter: SPARVERIS, Nikos (Temple University)

Session Classification: QCD

Contribution ID: 65

Type: **not specified**

Vector meson production in the polarized quark fragmentation process

Friday 14 May 2021 12:30 (25 minutes)

Presenter: KERBIZI, Albi (INFN, Trieste Section)

Session Classification: QCD

Contribution ID: 66

Type: **not specified**

The Energy Momentum Tensor and the D-term

Friday 14 May 2021 12:55 (25 minutes)

Presenter: RODINI, Simone (University of Pavia & INFN Pavia)

Session Classification: QCD

Contribution ID: 67

Type: **not specified**

QCD Analysis of Near-Threshold Photon-Proton Production of Heavy Quarkonium

Friday 14 May 2021 13:20 (25 minutes)

Presenter: GUO, Yuxun (University of Maryland)

Session Classification: QCD

Contribution ID: **68**

Type: **not specified**

Single spin asymmetry at two loops

Friday 14 May 2021 14:15 (25 minutes)

Presenter: HATTA, Yoshitaka (BNL)

Session Classification: QCD

Contribution ID: 69

Type: **not specified**

Correlation effects in hadronization

Friday 14 May 2021 14:40 (25 minutes)

Presenter: AVAGYAN, Harut (JLab)

Session Classification: QCD

Contribution ID: 70

Type: **not specified**

TMDs in the covariant parton model with a generalized systematic approach

Friday 14 May 2021 15:05 (25 minutes)

Presenter: BASTAMI, Saman (PhD candidate at University of Connecticut)

Session Classification: QCD

Contribution ID: 71

Type: **not specified**

Lorentz invariance relation anomalies and intrinsic parton transverse momentum

Friday 14 May 2021 15:30 (20 minutes)

Presenter: ASLAN, Fatma (JLab/UConn)

Session Classification: QCD

Contribution ID: 72

Type: **not specified**

A Comprehensive framework for deeply virtual exclusive experiments

Friday 14 May 2021 15:50 (20 minutes)

Presenter: LIUTI, simonetta (university of virginia)

Session Classification: QCD

Contribution ID: 73

Type: **not specified**

Summary and future plans

Friday 14 May 2021 16:10 (10 minutes)

Presenter: PROKUDIN, Alexei (Penn State Berks)

Session Classification: QCD

Contribution ID: 74

Type: **not specified**

Introduction

Monday 10 May 2021 09:35 (5 minutes)

Presenter: KANG, Zhongbo (UCLA)

Session Classification: QCD

Contribution ID: 75

Type: **not specified**

Isvector EMC effect from global QCD analysis with MARATHON data

Thursday 13 May 2021 15:00 (10 minutes)

Presenter: COCUZZA, Christopher (Temple University)

Session Classification: QCD

Contribution ID: 76

Type: **not specified**

Berkeley Seminar: Mismatches between Perturbative and Non-perturbative Views of Hadronization in QCD

Wednesday 12 May 2021 16:00 (1 hour)

Presenter: COLLINS, John (Penn State University)

Session Classification: John Collins: Berkeley Lab Nuclear Theory Seminar