

Session Program

23-27 Mar 2020



XXVIII International Workshop on Deep Inelastic Scattering and Related Subjects

Structure function and parton densities

Brooklyn, NY
333 Adams Street, Brooklyn, New York 11201, USA

Tuesday 24 March

09:00

Structure function and parton densities: Updates of global PDF analyses (I)

Session | **Location:** Brooklyn, NY, 333 Adams Street, Brooklyn, New York 11201, USA | **Conveners:** Katarzyna Wichmann, Maria Zurita, Benjamin Nachman

09:00–09:30 Progress in the ABM PDF fit

Speakers

Johannes BLUEMLEIN, Prof. Sven-Olaf Moch

09:30–10:00 Insights from the CT18 NNLO global QCD analysis

Speaker

Timothy Hobbs

10:00–10:30 The new PDF sets in the MSTW/MMHT framework

Speaker

Prof. Robert Thorne

10:30

11:00

Structure function and parton densities: PDFs from Lattice QCD

Session | **Location:** Brooklyn, NY, 333 Adams Street, Brooklyn, New York 11201, USA | **Conveners:** Katarzyna Wichmann, Maria Zurita, Benjamin Nachman

11:00–11:15 Nonperturbative Collins-Soper Kernel from Lattice QCD

Speaker

Dr Yong Zhao

11:15–11:30

Nucleon valence quark distributions from Lattice QCD using distillation

Speaker

Dr Christos Kallidonis

11:30–11:45 Nucleon and pion structure at physical pion mass

Speaker

Dr Joe Karpie

11:45–12:00

Two-current Correlations and the Pion Valence Quark Distribution from Lattice QCD

Speaker

Colin Egerer

12:00–12:15 Lattice QCD determination of valence PDF of pion

Speaker

Nikhil Karthik

12:15–12:30

Unpolarized and Helicity Isovector Nucleon Parton Distribution Functions on Superfine Lattice

Speaker

Mr Xiang Gao

12:30-12:45

First Glance at Nucleon Polarized Gluon and Strange Parton Distribution Functions on the Lattice**Speaker**

Prof. Huey-Wen Lin

12:45-13:00

Charting the future lattice-PDF synergy**Speaker**

Timothy Hobbs

13:00

14:30

Structure function and parton densities: Jets & PDFs**Session** | **Location:** Brooklyn, NY, 333 Adams Street, Brooklyn, New York 11201, USA | **Conveners:** Benjamin Nachman, Katarzyna Wichmann, Maria Zurita

14:30-14:48

Measurements of Jet Cross Sections in proton-proton Collisions at STAR**Speaker**

Zilong Chang

14:48-15:06

ATLAS Jet Measurements for PDFs and their Uncertainties**Speaker**

Robert HANKACHE

15:06-15:24

Determination of proton parton distribution functions using ATLAS data**Speaker**

Stefano CAMARDA

15:24-15:42

V+heavy flavor jets and constraints to PDFs in CMS**Speaker**

Avto Kharchilava

15:42-16:00

PDF constraints from dijet production at the LHC**Speaker**

Emanuele Roberto Nocera

16:00

16:30

Structure function and parton densities: DIS (I)**Session** | **Location:** Brooklyn, NY, 333 Adams Street, Brooklyn, New York 11201, USA | **Conveners:** Maria Zurita, Katarzyna Wichmann, Benjamin Nachman

16:30-16:45

Study of proton parton distribution functions at high x**Speaker**

Allen Caldwell

16:45-17:00

Impact of full JLab 6 GeV DIS data on CTEQ-JLab (CJ) PDFs & nuclear effects**Speaker**

Dr Ishara Fernando

17:00-17:15

The shape of the $\bar{d} - \bar{u}$ asymmetry from DIS and Drell-Yan data**Speaker**

Wally Melnitchouk

17:15-17:30

Parton Distributions with Theory Uncertainties**Speaker**

Emanuele Roberto Nocera

17:30-17:45

Simultaneous extraction of spin-dependent and spin-averaged gluon PDFs**Speaker**

Yiyu Zhou

17:45-18:00

Critical analysis of Bayesian approaches to PDF uncertainties**Speaker**

Wally Melnitchouk

18:00

Wednesday 25 March

09:00

Structure function and parton densities: Updates of global PDF analyses (II)

Session | **Location:** Brooklyn, NY, 333 Adams Street, Brooklyn, New York 11201, USA | **Conveners:** Maria Zurita, Katarzyna Wichmann, Benjamin Nachman

09:00–09:30

Towards the NNPDF4.0 global analysis

Speaker

Juan Rojo

09:30–10:00

Recent QCD results from the xFitter project

Speaker

alexander glazov

10:00–10:30

Benchmarking for PDF4LHC20

Speaker

Prof. Joey Huston

10:30

11:00

Structure function and parton densities: Nuclear PDFs

Session | **Location:** Brooklyn, NY, 333 Adams Street, Brooklyn, New York 11201, USA | **Conveners:** Benjamin Nachman, Katarzyna Wichmann, Maria Zurita

11:00–11:20

From bound nucleons to the free neutron

Speaker

Efrain Segarra

11:20–11:40

Re-analysis of neutrino DIS data in the global nuclear PDFs

Speaker

Mr Khoirul Faiq Muzakka

11:40–12:00

Advances in the EPPS analysis of nuclear PDFs

Speaker

Petja Paakinen

12:00–12:20

Progress on nCTEQ PDFs: Challenges with LHC & JLab data

Speaker

Fredrick Olness

12:20–12:40

Impact of single-inclusive hadron data on nuclear PDFs in nCTEQ15

Speaker

Mr Pit Duwentäster

12:40–13:00

An updated global QCD analysis of nuclear PDFs using neural networks

Speaker

Jacob Ethier

13:00

14:30

Structure function and parton densities: DIS (II)

Session | **Location:** Brooklyn, NY, 333 Adams Street, Brooklyn, New York 11201, USA | **Conveners:** Maria Zurita, Benjamin Nachman, Katarzyna Wichmann

14:30-14:48

Deeply inelastic scattering structure functions on a hybrid quantum computer

Speaker

Niklas Mueller

14:48-15:06

Extracting the Neutron Structure Function from Global DIS Data with CJ15

Speaker

Shujie Li

15:06-15:24

Impact of heavy-flavor DIS data on unpolarized PDFs

Speaker

Carlota Andres

15:24-15:42

Combined analysis of inclusive/exclusive electroproduction from low to high x

Speaker

Astrid Hiller Blin

15:42-16:00

Pion Parton Distributions Using Threshold Resummation

Speaker

Patrick Barry

16:00

16:30

Structure function and parton densities: EW bosons and Top quark

Session | **Location:** Brooklyn, NY, 333 Adams Street, Brooklyn, New York 11201, USA | **Conveners:** Benjamin Nachman, Katarzyna Wichmann, Maria Zurita

16:30-16:48

Top quark pair-production cross-section measurements in the di-lepton channel with the ATLAS detector

Speaker

Richard Hawkings

16:48-17:06

Impact of top-quark pair production measurements on PDFs in the CT18 global QCD analysis

Speaker

Dr Marco Guzzi

17:06-17:24

Measurement of the W-boson rapidity, helicity, and differential cross sections in CMS

Speaker

Marc Dunser

17:24-17:42

Constraining the Sea Quark Distributions Through W and Z Cross Sections and Cross-Section Ratios Measured at STAR

18:00

Speaker

Matt Posik

17:42-18:00

Precise predictions for high-energy neutrino propagation in matter

Speaker

Juan Rojo

Thursday 26 March

09:00

Structure function and parton densities: TMDs

Session | **Location:** Brooklyn, NY, 333 Adams Street, Brooklyn, New York 11201, USA | **Conveners:** Benjamin Nachman, Katarzyna Wichmann, Maria Zurita

09:00–09:18

Measurement of the Drell-Yan transverse momentum dependence over a wide mass range at the LHC

Speaker

Bugra Bilin

09:18–09:36

Drell-Yan spin and azimuthal asymmetries at COMPASS

Speaker

Mr Saman Bastami

09:36–09:54

TMD splitting functions in the parton branching method

Speaker

Lissa Keersmaekers

09:54–10:12

DIS structure functions and unintegrated PDFs with off-shell matrix elements

Speaker

Aleksander Kusina

10:12–10:30

The role of dynamical resolution in PB TMD distribution extracted from DIS precision data

Speaker

Sara Taheri Monfared

10:30