

# **Lattice PDF Workshop, 6–8 April 2018**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

# Introduction and Remarks on LaMET

*Friday 6 April 2018 09:00 (40 minutes)*

**Presenter:** JI, xiangdong (university of maryland)

**Session Classification:** Theory developments

Contribution ID: 2

Type: **not specified**

## Renormalization in the LaMET

*Friday 6 April 2018 09:40 (40 minutes)*

**Presenter:** ZHANG, Jianhui

**Session Classification:** Theory developments

Contribution ID: 3

Type: **not specified**

# Power Corrections and the Meson Distribution Amplitudes

*Friday 6 April 2018 11:00 (40 minutes)*

**Presenter:** CHEN, Jiunn-Wei

**Session Classification:** Theory developments

Contribution ID: 4

Type: **not specified**

## OPE Analysis of Quasi-PDFs

*Friday 6 April 2018 11:40 (40 minutes)*

**Presenter:** JIN, Luchang

**Session Classification:** Theory developments

Contribution ID: 5

Type: **not specified**

## **Perturbative and non-perturbative renormalization for QPDF operators**

*Friday 6 April 2018 14:00 (40 minutes)*

**Presenter:** Prof. CONSTANTINO, Martha (Temple University)

**Session Classification:** Theory developments

Contribution ID: 6

Type: **not specified**

## **Matching the quasi parton distribution in a momentum subtraction scheme**

*Friday 6 April 2018 14:40 (40 minutes)*

**Presenter:** Dr ZHAO, Yong (Massachusetts Institute of Technology)

**Session Classification:** Theory developments

Contribution ID: 7

Type: **not specified**

# Auxiliary field approach for nonperturbative renormalization

*Saturday 7 April 2018 17:10 (40 minutes)*

**Presenter:** GREEN, Jeremy (DESY, Zeuthen)

**Session Classification:** Lattice developments



Contribution ID: 8

Type: **not specified**

## Particle number conservation in different matching procedures

*Friday 6 April 2018 16:30 (40 minutes)*

**Presenter:** STEFFENS, Fernanda (DESY - Zeuthen)

**Session Classification:** Theory developments

Contribution ID: 9

Type: **not specified**

## Quasi TMDPDFs

*Friday 6 April 2018 17:10 (40 minutes)*

**Presenter:** Dr EBERT, Markus (MIT)

**Session Classification:** Theory developments

Contribution ID: **10**

Type: **not specified**

## Pseudo Parton Distributions on the lattice

*Friday 6 April 2018 17:50 (40 minutes)*

**Presenter:** KARPIE, Joseph (College of William and Mary)

**Session Classification:** Theory developments

Contribution ID: **11**

Type: **not specified**

# Improving PDF Fits with Lattice-QCD Calculations

*Saturday 7 April 2018 09:00 (40 minutes)*

**Presenter:** WEN LIN, Huey-

**Session Classification:** Lattice developments

Contribution ID: 12

Type: **not specified**

## **Reconstruction of light-cone parton distribution functions from lattice QCD simulations at the physical point**

*Saturday 7 April 2018 09:40 (40 minutes)*

**Presenter:** CICHY, Krzysztof

**Session Classification:** Lattice developments

Contribution ID: 13

Type: **not specified**

## **Lattice Calculation on Quasi-PDF at the physical pion mass**

*Saturday 7 April 2018 10:50 (30 minutes)*

**Presenter:** LIU, Yu-Sheng

**Session Classification:** Lattice developments

Contribution ID: 14

Type: **not specified**

## Higher moments of parton distribution functions from lattice QCD

*Saturday 7 April 2018 11:20 (40 minutes)*

**Presenter:** DAVOUDI, Zohreh

**Session Classification:** Lattice developments

Contribution ID: 15

Type: **not specified**

## **Pion light-cone distribution amplitude from lattice QCD with valence heavy quark**

*Saturday 7 April 2018 12:00 (30 minutes)*

**Presenter:** LIN, David (National Chiao-Tung University)

**Session Classification:** Lattice developments



Contribution ID: 16

Type: **not specified**

# Understanding the structure of the proton through large-scale simulations

*Saturday 7 April 2018 14:00 (40 minutes)*

**Presenter:** ALEXANDROU, Constantia

**Session Classification:** Lattice developments

Contribution ID: 17

Type: **not specified**

# Pion Distribution Amplitudes from Euclidean Correlation Functions

*Saturday 7 April 2018 14:40 (40 minutes)*

**Presenter:** Prof. BALI, Gunnar (Universität Regensburg)

**Session Classification:** Lattice developments

Contribution ID: **18**

Type: **not specified**

## **Q-PDF with non-perturbative renormalization**

*Saturday 7 April 2018 15:20 (40 minutes)*

**Presenter:** YANG, yibo (University of Kentucky, US)

**Session Classification:** Lattice developments

Contribution ID: **19**

Type: **not specified**

## **Putative finite volume effects for spatially-nonlocal operators**

*Saturday 7 April 2018 16:30 (40 minutes)*

**Presenter:** MONAHAN, Christopher

**Session Classification:** Lattice developments

Contribution ID: **20**

Type: **not specified**

## **Lattice calculation of Hadronic Tensor**

*Sunday 8 April 2018 11:30 (30 minutes)*

**Presenter:** LIANG, Jian (University of Kentucky)

**Session Classification:** Other developments and more discussions

Contribution ID: 21

Type: **not specified**

## Nucleon's Axial Charge

*Friday 6 April 2018 15:20 (40 minutes)*

**Presenter:** WALKER-LOUD, Andre (LBNL)

**Session Classification:** Theory developments

Contribution ID: 22

Type: **not specified**

## **Extract partonic structure from hadronic lattice cross sections**

*Sunday 8 April 2018 09:00 (40 minutes)*

**Presenter:** QIU, Jianwei (Jefferson Lab)

**Session Classification:** Other developments and more discussions

Contribution ID: 23

Type: **not specified**

## Structure of pseudo- and quasi-PDFs

*Sunday 8 April 2018 09:40 (40 minutes)*

**Presenter:** RADYUSHKIN, Anatoly

**Session Classification:** Other developments and more discussions



Contribution ID: 24

Type: **not specified**

## Comments on current-current correlator

*Sunday 8 April 2018 10:50 (40 minutes)*

**Presenter:** LIU, Kehfei (University of Kentucky)

**Session Classification:** Other developments and more discussions

Contribution ID: 25

Type: **not specified**

## Round table discussions led by Karl Jansen

*Sunday 8 April 2018 12:00 (30 minutes)*

Participants

Panels: X. Ji, J.-W. Chen, J. Qiu, A. Radyushkin, F. Steffens, All

**Session Classification:** Other developments and more discussions

Contribution ID: 26

Type: **not specified**

## Lattice PDFs at the physical pion mass

**Presenter:** LIU, Yu-Sheng

**Session Classification:** Theory developments