

Physics Opportunities with Heavy Quarkonia at the EIC



Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome and workshop goals

Monday, 25 October 2021 10:00 (15 minutes)

Presenters: WEISS, Christian (Jefferson Lab); OLNESS, Fredrick (SMU); VITEV, Ivan (LANL); Dr HUANG, Jin (Brookhaven National Lab); LI, Xuan (Los Alamos National Laboratory)

Session Classification: Quarkonium production mechanism

Contribution ID: 2

Type: **not specified**

TBD

Session Classification: Quarkonium production mechanism

Contribution ID: 3

Type: **not specified**

Quarkonium structure in LQCD at zero and finite temperature

Monday, 25 October 2021 11:15 (30 minutes)

Presenter: PETRECZKY, Peter Petreczky (BNL)

Session Classification: Quarkonium production mechanism

Contribution ID: 4

Type: **not specified**

Quarkonium production: where do we stand and where to go with the EIC?

Monday, 25 October 2021 10:45 (30 minutes)

Presenter: LANSBERG, Jean-Philippe (Paris-Saclay U. - IJCLab - CNRS)

Session Classification: Quarkonium production mechanism

Contribution ID: 5

Type: **not specified**

LDMEs extraction, relativistic correction, and soft gluon resummation

Monday, 25 October 2021 12:15 (30 minutes)

Presenter: MA, Yan-Qing (Peking University)

Session Classification: Quarkonium production mechanism

Contribution ID: 6

Type: **not specified**

Quarkonia and TMD factorization

Monday, 25 October 2021 12:45 (30 minutes)

Presenter: Prof. MEHEN, Thomas (Duke)

Session Classification: Quarkonium production mechanism

Contribution ID: 7

Type: **not specified**

Quarkonium production near threshold

Monday, 25 October 2021 14:15 (30 minutes)

Presenter: YUAN, Feng (Lawrence Berkeley National Laboratory)

Session Classification: Quarkonium production mechanism

Contribution ID: 8

Type: **not specified**

Quarkonia at small x and gluon saturation / relation to diffraction

Monday, 25 October 2021 14:45 (30 minutes)

Presenter: WATANABE, Kazuhiro (Subatech)

Session Classification: Quarkonium production mechanism

Contribution ID: 9

Type: **not specified**

Quarkonia and Black Hole Merger

Monday, 25 October 2021 10:15 (30 minutes)

Presenter: ROTHSTEIN, Ira (CMU)

Session Classification: Quarkonium production mechanism

Contribution ID: **10**

Type: **not specified**

Heavy quarkonium production on light nuclei

Tuesday, 26 October 2021 11:30 (30 minutes)

Presenter: ILIEVA, Yordanka (University of South Carolina)

Session Classification: Probing initial state and final state interactions

Contribution ID: 11

Type: **not specified**

Probing gluonic structure in diffractive J/psi production

Tuesday, 26 October 2021 11:00 (30 minutes)

Presenter: STRIKMAN, Mark (Penn State University)

Session Classification: Probing initial state and final state interactions

Contribution ID: 12

Type: **not specified**

Quarkonia and final state interactions- Overview of RHIC & LHC results

Tuesday, 26 October 2021 10:30 (30 minutes)

Presenter: MA, Rongrong (Brookhaven National Laboratory)

Session Classification: Probing initial state and final state interactions

Contribution ID: 13

Type: **not specified**

Near-threshold J/ψ production and J/ψ -N interactions

Tuesday, 26 October 2021 10:00 (30 minutes)

Presenter: HILLER BLIN, Astrid (Thomas Jefferson National Accelerator Facility)

Session Classification: Probing initial state and final state interactions

Contribution ID: 14

Type: **not specified**

Effective theories of quarkonia in matter

Tuesday, 26 October 2021 12:30 (30 minutes)

Presenter: VITEV, Ivan (LANL)

Session Classification: Probing initial state and final state interactions

Contribution ID: 15

Type: **not specified**

Quarkonia and open quantum systems

Tuesday, 26 October 2021 13:00 (30 minutes)

Presenter: BRAMBILLA, Nora (Munich Technical University)

Session Classification: Probing initial state and final state interactions

Contribution ID: 16

Type: **not specified**

Transport models of quarkonia

Tuesday, 26 October 2021 13:30 (30 minutes)

Presenter: Prof. RAPP, Ralf

Session Classification: Probing initial state and final state interactions

Contribution ID: 17

Type: **not specified**

Lessons learned from exclusive J/psi and psi(2S) production at HERA

Wednesday, 27 October 2021 10:05 (30 minutes)

Presenter: GRZELAK , Grzegorz (University of Warsaw Physics)

Session Classification: Experimental detection of Quarkonium at EIC

Contribution ID: **18**

Type: **not specified**

Exclusive production of Quarkonia at EIC

Wednesday, 27 October 2021 11:35 (30 minutes)

Presenter: KLEIN, Spencer (LBNL)

Session Classification: Experimental detection of Quarkonium at EIC

Contribution ID: 19

Type: **not specified**

Quarkonium detection and physics with LHCb

Wednesday, 27 October 2021 10:35 (30 minutes)

Presenter: DURHAM, Matt (Los Alamos National Laboratory)

Session Classification: Experimental detection of Quarkonium at EIC

Contribution ID: 20

Type: **not specified**

Quarkonium detection and physics with sPHENIX

Wednesday, 27 October 2021 11:05 (30 minutes)

Presenter: FRAWLEY, Anthony (Florida State University)

Session Classification: Experimental detection of Quarkonium at EIC

Contribution ID: 21

Type: **not specified**

Quarkonium detection and physics with ATHENA

Wednesday, 27 October 2021 14:10 (30 minutes)

Presenter: SICHTERMANN, Ernst (Lawrence Berkeley National Laboratory)

Session Classification: Experimental detection of Quarkonium at EIC

Contribution ID: 22

Type: **not specified**

Quarkonium detection and physics with CORE

Wednesday, 27 October 2021 13:40 (30 minutes)

Presenter: Prof. HYDE, Charles (Old Dominion University)

Session Classification: Experimental detection of Quarkonium at EIC

Contribution ID: 23

Type: **not specified**

Quarkonium detection and physics with ECCE

Wednesday, 27 October 2021 13:10 (30 minutes)

Presenter: LI, xinbai (USTC)

Session Classification: Experimental detection of Quarkonium at EIC

Contribution ID: 24

Type: **not specified**

J/psi measurements in ALICE

Monday, 25 October 2021 13:15 (15 minutes)

Presenter: BELL HECHAVARRÍA, Ailec de la Caridad (Westfälische Wilhelms-Universität)

Session Classification: Quarkonium production mechanism

Contribution ID: 25

Type: **not specified**

Production and polarization of J/psi to α_s^3

Monday, 25 October 2021 13:30 (15 minutes)

Presenter: CHEUNG, Vincent (LLNL)

Session Classification: Quarkonium production mechanism

Contribution ID: 26

Type: **not specified**

Impact of heavy quarkonium data from the LHC on nuclear PDFs

Monday, 25 October 2021 13:45 (15 minutes)

Presenter: DUWENTAESTER, Pit

Session Classification: Quarkonium production mechanism

Contribution ID: 27

Type: **not specified**

Suppression of prompt quarkonium states in electron-nucleus collisions

Tuesday, 26 October 2021 14:00 (15 minutes)

Presenter: OLIVANT , Ian (UCSB)

Session Classification: Probing initial state and final state interactions

Contribution ID: 28

Type: **not specified**

J/psi and Psi(2s) measurements in PHENIX

Tuesday, 26 October 2021 14:15 (15 minutes)

Presenter: SMITH, Krista (FSU)

Session Classification: Probing initial state and final state interactions

Contribution ID: 29

Type: **not specified**

J/psi polarization at EIC within the NRQCD approach and the matching issue

Tuesday, 26 October 2021 14:30 (15 minutes)

Presenter: MAXIA, Luca (INFN - CA)

Session Classification: Probing initial state and final state interactions

Contribution ID: 30

Type: **not specified**

Electroproduction of heavy quarkonia: Probing the spin-2 (gravitational) form factors of proton

Tuesday, 26 October 2021 14:45 (15 minutes)

Presenter: MAMO, Kiminad (Argonne National Laboratory)

Session Classification: Probing initial state and final state interactions

Contribution ID: 31

Type: **not specified**

Further experimental considerations on quarkonium measurements at EIC

Wednesday, 27 October 2021 12:05 (10 minutes)

Presenters: HUANG, Jin (Brookhaven National Lab); LI, Xuan (Los Alamos National Laboratory)

Session Classification: Experimental detection of Quarkonium at EIC

Contribution ID: 32

Type: **not specified**

Discussion

Wednesday, 27 October 2021 15:00 (40 minutes)

Session Classification: Experimental detection of Quarkonium at EIC

Contribution ID: 33

Type: **not specified**

Conclusion

Wednesday, 27 October 2021 15:40 (20 minutes)

Session Classification: Experimental detection of Quarkonium at EIC