

# **Inaugural Symposium and the first review of the Center for Frontiers in Nuclear Science**



## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Welcome by the BNL Director

Contribution ID: 2

Type: **not specified**

# Welcome

*Wednesday, 28 November 2018 08:45 (10 minutes)*

**Presenter:** GIBBS, Doon (Brookhaven National Laboratory)

**Session Classification:** Day 1

Contribution ID: 3

Type: **not specified**

## **Overview of the US nuclear science LRP2015 and future directions**

*Wednesday, 28 November 2018 09:00 (45 minutes)*

**Presenter:** GEESAMAN, Donald (Argonne National Laboratory)

**Session Classification:** Day 1

Contribution ID: 4

Type: **not specified**

## Parity + Neutrinos Overview

Contribution ID: 5

Type: **not specified**

# Fundamental Symmetries and Neutrinos in Nuclear Physics

*Wednesday, 28 November 2018 11:00 (45 minutes)*

**Presenter:** WILKERSON, John (U. Of North Carolina)

**Session Classification:** Day 1

Contribution ID: 6

Type: **not specified**

## **Nuclear structure in the 21st century – The science and status of FRIB**

**Presenters:** SHERYLL, GLASMACHER, NAZAREWICZ(?); SHERYLL, GLASMACHER, NAZAREWICZ, DEAN

Contribution ID: 7

Type: **not specified**

## **3D Structure of QCD and Entanglement**

*Wednesday, 28 November 2018 14:45 (45 minutes)*

**Presenter:** MULDER, Piet (Nikhef/VU)

**Session Classification:** Day 1



Contribution ID: 8

Type: **not specified**

## **JLab 12 GeV science and evolution into EIC**

*Thursday, 29 November 2018 09:45 (45 minutes)*

**Presenter:** MCKEOWN, Robert (Jefferson Laboratory)

**Session Classification:** Day 2

Contribution ID: 9

Type: **not specified**

# Glue That Binds Us All: The Science of Electron Ion Collider

*Thursday, 29 November 2018 09:00 (45 minutes)*

**Presenter:** HATTA, Yoshitaka (BNL/Yukawa Institute)

**Session Classification:** Day 2

Contribution ID: **10**

Type: **not specified**

## **RHIC science and evolution into the EIC**

*Thursday, 29 November 2018 11:00 (45 minutes)*

**Presenter:** TRIBBLE, Robert (BNL/Texas A&M University)

**Session Classification:** Day 2

Contribution ID: 11

Type: **not specified**

## **EIC: Accelerator challenges and opportunities**

**Presenter:** WILLEKE, MOROZOV

Contribution ID: 12

Type: **not specified**

## **EIC: Accelerator Challenges and Opportunities**

*Thursday, 29 November 2018 11:45 (45 minutes)*

**Presenter:** SERYI, Andrei (Jefferson Laboratory )

**Session Classification:** Day 2

Contribution ID: 13

Type: **not specified**

## **EIC Users Group and the Findings of the National Academy Science Review of the EIC**

*Thursday, 29 November 2018 16:00 (45 minutes)*

**Presenter:** AIDALA, Christine (U. of Michigan)

**Session Classification:** Day 2

Contribution ID: 14

Type: **not specified**

## **A vision for CFNS in the context of US nuclear science**

**Presenter:** DESHPANDE, Abhay

Contribution ID: 15

Type: **not specified**

## QCD phenomenology : from IceCube to LHC and beyond

*Friday, 30 November 2018 09:10 (10 minutes)*

**Presenter:** ONTOSO, Alba Soto (Brookhaven National Laboratory)

**Session Classification:** Review of CFNS



Contribution ID: 16

Type: **not specified**

# Quark and gluon contributions to the proton mass and spin

*Friday, 30 November 2018 09:20 (10 minutes)*

**Presenter:** RAJAN, Abha

**Session Classification:** Review of CFNS

Contribution ID: 17

Type: **not specified**

## **Studying Nucleon Structure through Inclusive Electron Scattering**

*Friday, 30 November 2018 09:30 (10 minutes)*

**Presenter:** SCHMOOKLER, Barak

**Session Classification:** Review of CFNS

Contribution ID: **18**

Type: **not specified**

## **Exclusive diffractive processes in high energy eA collisions**

*Friday, 30 November 2018 09:50 (10 minutes)*

**Presenter:** BOUSSARIE, Renaud (BNL)

**Session Classification:** Review of CFNS

Contribution ID: 19

Type: **not specified**

## **A journey from the LHC to an EIC with a short stop at RHIC and HERA**

*Friday, 30 November 2018 09:40 (10 minutes)*

**Presenter:** TU, Zhoudunming (Kong)

**Session Classification:** Review of CFNS

Contribution ID: 20

Type: **not specified**

# Quantum Entanglement at Collider Energies

*Friday, 30 November 2018 11:50 (10 minutes)*

**Presenter:** KHARZEEV, Dmitri

**Session Classification:** Review of CFNS

Contribution ID: 21

Type: **not specified**

# Forward Physics And Instrumentation From Colliders To Cosmic Rays

*Friday, 30 November 2018 12:10 (10 minutes)*

**Presenter:** KIRYLUK, Joanna

**Session Classification:** Review of CFNS

Contribution ID: 22

Type: **not specified**

## Report: Abhay Deshpande

**Session Classification:** Summary of Research Activities

Contribution ID: 23

Type: **not specified**

## **Report: Kolja Kauder**

**Session Classification:** Summary of Research Activities



Contribution ID: 24

Type: **not specified**

## Report: Abha Rajan

**Session Classification:** Summary of Research Activities

Contribution ID: 25

Type: **not specified**

## Lattice QCD and EIC

*Wednesday, 28 November 2018 14:00 (45 minutes)*

**Presenter:** DETMOLD, William (MIT)

**Session Classification:** Day 1

Contribution ID: 26

Type: **not specified**

## Orientation, practical things

*Wednesday, 28 November 2018 08:55 (5 minutes)*

**Presenter:** DESHPANDE, Abhay (Stony Brook University)

**Session Classification:** Day 1

Contribution ID: 27

Type: **not specified**

## QCD and Quantum Computing

*Wednesday, 28 November 2018 16:00 (45 minutes)*

**Presenter:** SAVAGE, Martin (U. of Washington)

**Session Classification:** Day 1

Contribution ID: 28

Type: **not specified**

## **Vision for the Center for Frontiers in Nuclear Science**

**Presenter:** DESHPANDE, Abhay (Stony Brook University)

Contribution ID: 29

Type: **not specified**

## Breakfast

Contribution ID: **30**

Type: **not specified**

## Visit and walkabout of CFNS

**Session Classification:** Review of CFNS

Contribution ID: **31**

Type: **not specified**

## **CFNS Workshops: Introduction**

**Presenter:** DESHPANDE, Abhay

**Session Classification:** Review of CFNS



Contribution ID: 32

Type: **not specified**

## **Next-generation GPD Studies With Exclusive Meson Production At EIC**

**Session Classification:** Review of CFNS

Contribution ID: 33

Type: **not specified**

## Probing quark-gluon matter with jets

*Friday, 30 November 2018 12:00 (10 minutes)*

**Presenter:** MEHTAR-TANI, Yacine

**Session Classification:** Review of CFNS

Contribution ID: 34

Type: **not specified**

## **Short-range nuclear correlations at an Electron-Ion Collider**

*Friday, 30 November 2018 11:40 (10 minutes)*

**Presenter:** VENUGOPALAN, Raju

**Session Classification:** Review of CFNS

Contribution ID: 35

Type: **not specified**

## IAC and Program Steering Committee

*Friday, 30 November 2018 13:30 (30 minutes)*

**Session Classification:** Review of CFNS

Contribution ID: 36

Type: **not specified**

## **IAC and administrative staff**

*Friday, 30 November 2018 14:30 (15 minutes)*

**Session Classification:** Review of CFNS

Contribution ID: 37

Type: **not specified**

## **Executive Session with CFNS Director**

*Friday, 30 November 2018 14:45 (30 minutes)*

**Session Classification:** Review of CFNS

Contribution ID: 38

Type: **not specified**

## Challenges in Perturbative QCD and the Nonperturbative Interface

*Wednesday, 28 November 2018 11:45 (45 minutes)*

**Presenter:** STERMAN, George (C.N. Yang Center, Stony Brook University)

**Session Classification:** Day 1

Contribution ID: 39

Type: **not specified**

## **Excitement and Challenges in Nuclear Structure: Science of FRIB**

*Wednesday, 28 November 2018 09:45 (45 minutes)*

**Presenter:** NAZAREWICZ, Witold (Michigan State University)

**Session Classification:** Day 1



Contribution ID: 40

Type: **not specified**

## QCD and Gravity

*Wednesday, 28 November 2018 16:45 (45 minutes)*

**Presenter:** GOLDBERGER, Walter (Yale University )

**Session Classification:** Day 1

Contribution ID: 41

Type: **not specified**

## **EIC detector concept for the 21st Century**

*Thursday, 29 November 2018 14:00 (45 minutes)*

**Presenter:** ASCHENAUER, Elke (Brookhaven National Laboratory)

**Session Classification:** Day 2

Contribution ID: 42

Type: **not specified**

## **EIC Detector Technology Challenges and the R&D program**

*Thursday, 29 November 2018 14:45 (45 minutes)*

**Presenter:** DEMARTEAU, Marcel (Argonne National Laboratory )

**Session Classification:** Day 2

Contribution ID: 43

Type: **not specified**

## Closeout/Summary

*Friday, 30 November 2018 15:15 (15 minutes)*

Contribution ID: 44

Type: **not specified**

## Departure

*Friday, 30 November 2018 15:30 (20 minutes)*

Contribution ID: 45

Type: **not specified**

## **Vision for the Center for Frontiers in Nuclear Science**

*Thursday, 29 November 2018 16:45 (45 minutes)*

**Presenter:** DESHPANDE, Abhay (Stony Brook University )

**Session Classification:** Day 2

Contribution ID: 46

Type: **not specified**

## **Studying the phases and structure of QCD matter: From RHIC to EIC**

*Friday, 30 November 2018 10:00 (10 minutes)*

**Presenter:** BRANDENBERG, James Daniel

**Session Classification:** Review of CFNS

Contribution ID: 47

Type: **not specified**

## Jet Observables and Techniques

*Friday, 30 November 2018 09:00 (10 minutes)*

**Presenter:** KOUDER, Kolja (CFNS, BNL)

**Session Classification:** Review of CFNS



Contribution ID: 48

Type: **not specified**

## Next Generation GPD Studies

*Friday, 30 November 2018 12:20 (10 minutes)*

**Presenters:** WEISS , Christian; FAZIO, Salvatore

**Session Classification:** Review of CFNS

Contribution ID: 49

Type: **not specified**

## **Collectivity in small systems, from LHC to EIC**

*Friday, 30 November 2018 10:10 (10 minutes)*

**Presenter:** CHEN, Zhenyu

**Session Classification:** Review of CFNS

Contribution ID: 50

Type: **not specified**

## **Inside of the nucleon: zooming in and out**

*Friday, 30 November 2018 11:10 (10 minutes)*

**Presenter:** PARK, Sanghwa (Stony Brook University)

**Session Classification:** Review of CFNS

Contribution ID: 51

Type: **not specified**

# **Nuclear structure studies with Pelletron, CEBAF, and EIC**

*Friday, 30 November 2018 11:20 (10 minutes)*

**Presenter:** GHOSH, Chandan (Stony Brook University)

**Session Classification:** Review of CFNS

Contribution ID: 52

Type: **not specified**

## **Studying nucleon/nucleus structure with RHIC, CEBAF, and EIC**

*Friday, 30 November 2018 11:30 (10 minutes)*

**Presenter:** ZHANG, Jinlong (Stony Brook University )

**Session Classification:** Review of CFNS