

# The 39th Winter Workshop on Nuclear Dynamics



## Report of Contributions

Contribution ID: 1

Type: **not specified**

## Reception

Contribution ID: 2

Type: **not specified**

# Dynamical fluctuations in Heavy Ion Collisions

*Monday 12 February 2024 08:00 (30 minutes)*

**Presenter:** Prof. PRUNEAU, Claude Andre (Wayne State University (US))

Contribution ID: 3

Type: **not specified**

## **Disoriented Isospin Condensates as source of anomalous kaon correlations at LHC**

*Monday 12 February 2024 08:30 (30 minutes)*

**Presenter:** SINGH, Mayank (University of Minnesota)

Contribution ID: 4

Type: **not specified**

## **Baryon number dynamics in heavy ion collisions**

*Monday 12 February 2024 09:00 (30 minutes)*

**Presenter:** FRENKLAKH, David (Stony Brook University)

Contribution ID: 5

Type: **not specified**

## **Probing strongly interacting matter with clusters**

*Monday 12 February 2024 09:30 (30 minutes)*

**Presenter:** BRATKOVSKAYA, Elena (GSI, Darmstadt)

Contribution ID: 6

Type: **not specified**

## **Jets at STAR**

*Monday 12 February 2024 10:30 (30 minutes)*

**Presenter:** MOONEY, Isaac

Contribution ID: 7

Type: **not specified**

## **Measurements of identified particle spectra in Ru+Ru and Zr+Zr collisions at 200 GeV by the STAR experiment**

*Monday 12 February 2024 11:00 (30 minutes)*

**Presenter:** MA, Rongrong (BNL)



Contribution ID: 8

Type: **not specified**

## **Scaling properties of $\phi$ -meson and charged hadron production at PHENIX**

*Monday 12 February 2024 11:30 (30 minutes)*

**Presenter:** DOOMRA, Vassu (Stony Brook University)

Contribution ID: 9

Type: **not specified**

## **Disentangling centrality bias and final-state effects in the production of neutral pions using direct photons in d+Au collisions at 200 GeV**

*Monday 12 February 2024 17:30 (30 minutes)*

**Presenter:** FIRAK, Daniel

Contribution ID: **10**

Type: **not specified**

## **Diffraction Vector Meson photoproduction at RHIC and at the future EIC**

*Monday 12 February 2024 18:00 (30 minutes)*

**Presenter:** TU, Zhoudunming

Contribution ID: 11

Type: **not specified**

## **Tracing the baryon number carrier through photon induced processes from STAR**

*Monday 12 February 2024 18:30 (30 minutes)*

**Presenter:** TRIBEDY, Prithwish (Brookhaven National Lab)

Contribution ID: 12

Type: **not specified**

## A photon runs through it

*Monday 12 February 2024 19:00 (30 minutes)*

**Presenter:** Prof. BRANDENBURG, James (Ohio State University)

Contribution ID: 13

Type: **not specified**

## Overview of JETSCAPE

*Tuesday 13 February 2024 08:00 (30 minutes)*

**Presenter:** MAJUMDER, Abhijit (Wayne State University)

Contribution ID: 14

Type: **not specified**

## **Holographic transport coefficients and jet energy loss for the hot and dense quark-gluon plasma.**

*Tuesday 13 February 2024 08:30 (30 minutes)*

**Presenter:** GREFA, Joaquin

Contribution ID: 15

Type: **not specified**

## **Sequentially Charming Chemical Freeze-out in Heavy Ion Collisions at LHC Energies**

*Tuesday 13 February 2024 09:00 (30 minutes)*

**Presenter:** FLOR, Fernando Antonio (Yale University (US))



Contribution ID: 16

Type: **not specified**

# Hints of Entanglement Suppression in Hyperon-Nucleon Scattering

*Tuesday 13 February 2024 09:30 (30 minutes)*

**Presenter:** LOW, Ian

Contribution ID: 17

Type: **not specified**

## **Measurement of jet cross-section and substructure in p+p collisions 200 GeV with the PHENIX experiment at RHIC**

*Tuesday 13 February 2024 10:30 (30 minutes)*

**Presenter:** LEBEDEV, Alexandre (Iowa State University (US))

Contribution ID: **18**

Type: **not specified**

## **Probing the parton shower and hadronization with novel jet substructure measurements in 200 GeV pp collisions at STAR**

*Tuesday 13 February 2024 11:00 (30 minutes)*

**Presenter:** SONG, Youqi

Contribution ID: 19

Type: **not specified**

## **Jet Quenching Dependence on Angularities and Flavor at RHIC**

*Tuesday 13 February 2024 11:30 (30 minutes)*

**Presenter:** SALUR, Sevil (Rutgers State Univ. of New Jersey (US))

Contribution ID: 20

Type: **not specified**

## **Imaging the QGP with Energy Correlators**

*Tuesday 13 February 2024 17:30 (30 minutes)*

**Presenter:** MOULT, Ian

Contribution ID: 21

Type: **not specified**

## **Probing the short-distance structure of QGP with EEC**

*Tuesday 13 February 2024 18:00 (30 minutes)*

**Presenter:** Dr WANG, Xin-Nian (Lawrence Berkeley National Lab. (US))

Contribution ID: 22

Type: **not specified**

## **Experimental determination of energy-energy correlators in heavy ion collisions**

*Tuesday 13 February 2024 18:30 (30 minutes)*

**Presenter:** VIINIKAINEN, Jussi (Vanderbilt University (US))

Contribution ID: 23

Type: **not specified**

## **Probing jet substructure with energy correlators in pp collisions at 13 TeV with ALICE**

*Tuesday 13 February 2024 19:00 (30 minutes)*

**Presenter:** RAI, Ananya (Yale University (US))



Contribution ID: 24

Type: **not specified**

## **Are high energy pp collisions really elementary collisions? Results from EPOS4HQ**

*Wednesday 14 February 2024 08:00 (30 minutes)*

**Presenter:** AICHELIN, Joerg

Contribution ID: 25

Type: **not specified**

## **Triple-differential yields from heavy-ion collisions through reaction-plane deblurring**

*Wednesday 14 February 2024 08:30 (30 minutes)*

**Presenter:** DANIELEWICZ, Pawel (Michigan State University)

Contribution ID: 26

Type: **not specified**

## sPHENIX Forward Detectors and Physics

*Wednesday 14 February 2024 09:30 (30 minutes)*

**Presenter:** UMAKA, Ejiro Naomi (Brookhaven National Laboratory (US))

Contribution ID: 27

Type: **not specified**

## **Construction and Physics of the Event Plane Detectors at RHIC**

*Wednesday 14 February 2024 09:00 (30 minutes)*

**Presenter:** PROTZMAN, Tristan (Lehigh University)

Contribution ID: 28

Type: **not specified**

## **Jet performance studies of sPHENIX with early data and simulation**

*Wednesday 14 February 2024 10:30 (30 minutes)*

**Presenter:** KIMELMAN, Benjamin (Vanderbilt University)

Contribution ID: 29

Type: **not specified**

## **Exploring the Feasibility of Imaging Atomic Nuclei at the Electron-Ion Collider**

*Wednesday 14 February 2024 11:00 (30 minutes)*

**Presenter:** Dr MAGDY ABDELRAHMAN, Niseem (The University of Tennessee, Knoxville)

Contribution ID: **30**

Type: **not specified**

## **Outreach with the EIC**

*Wednesday 14 February 2024 11:30 (30 minutes)*

**Presenter:** KUNNAWALKAM ELAYAVALLI, Raghav (Vanderbilt University)

Contribution ID: 31

Type: **not specified**

## **The 2023 Long-Range Plan for Nuclear Science from the Heavy Ion Perspective**

*Wednesday 14 February 2024 12:00 (30 minutes)*

**Presenter:** RUAN, Lijuan



Contribution ID: 32

Type: **not specified**

## **Understanding parton evolution in matter from renormalization group analysis**

*Wednesday 14 February 2024 17:30 (30 minutes)*

**Presenter:** Dr VITEV, Ivan

Contribution ID: 33

Type: **not specified**

## **Electromagnetic probes in heavy-ion collisions: progress and open questions**

*Wednesday 14 February 2024 18:00 (30 minutes)*

**Presenter:** PAQUET, Jean-Francois (Vanderbilt University)

Contribution ID: 34

Type: **not specified**

## **Directed flow splitting and EM field effects**

*Wednesday 14 February 2024 18:30 (30 minutes)*

**Presenter:** TANG, Aihong

Contribution ID: 35

Type: **not specified**

## **Non-prompt direct-photon production in Au+Au collisions at 200 GeV**

*Wednesday 14 February 2024 19:00 (30 minutes)*

**Presenter:** Dr SHARMA, Deepali (Georgia State University)

Contribution ID: 36

Type: **not specified**

## **Recent Developments on Theory of matter at High Baryon Density**

*Thursday 15 February 2024 08:00 (30 minutes)*

**Presenter:** MCLERRAN, Larry

Contribution ID: 37

Type: **not specified**

## **Heavy ion collisions from 62.4 AGeV down to 4 AGeV in the EPOS4 framework**

*Thursday 15 February 2024 08:30 (30 minutes)*

**Presenter:** WERNER, Klaus

Contribution ID: 38

Type: **not specified**

## Finite density QCD equation of state and lattice-based $T'$ -expansion (Ising-TExS)

*Thursday 15 February 2024 09:00 (30 minutes)*

**Presenter:** KAHANGIRWE, Micheal

Contribution ID: 39

Type: **not specified**

## **4D-TExS: A new 4D lattice QCD equation of state with extended density coverag**

*Thursday 15 February 2024 09:30 (30 minutes)*

**Presenter:** Dr JAHAN, Johannès (University of Houston - Department of Physics)



Contribution ID: 40

Type: **not specified**

## **The sign problem of dense cool nuclear matter and real-time simulations**

*Thursday 15 February 2024 10:30 (30 minutes)*

**Presenter:** VALGUSHEV, Semeon (Iowa State University)

Contribution ID: 41

Type: **not specified**

# **Unveiling Complexities in the Phase Diagram through the Deconfinement Potential and Vector Meson Analysis in the Chiral Mean-Field Model**

*Thursday 15 February 2024 11:00 (30 minutes)*

**Presenter:** KUMAR, Rajesh

Contribution ID: 42

Type: **not specified**

## Status of the MUSES collaboration

*Thursday 15 February 2024 11:30 (30 minutes)*

**Presenter:** RATTI, Claudia

Contribution ID: 43

Type: **not specified**

## Overview of HADES experimental results

*Thursday 15 February 2024 17:30 (30 minutes)*

**Presenter:** STEFANIAK, Maria

Contribution ID: 44

Type: **not specified**

## Extraction of QGP speed of sound with CMS

*Thursday 15 February 2024 18:00 (30 minutes)*

**Presenter:** LI, Wei (Rice University (US))

Contribution ID: 45

Type: **not specified**

## **Transverse moment correlations and fluctuations from 3.0 GeV fixed-target collisions at STAR**

*Thursday 15 February 2024 18:30 (30 minutes)*

**Presenter:** MANIKANDHAN, Rutik (University of Houston)

Contribution ID: 46

Type: **not specified**

## **Azimuthally sensitive femtoscopy with RHIC Beam Energy Scan II data from STAR**

*Thursday 15 February 2024 19:00 (30 minutes)*

**Presenter:** KHYZHNIAK, Eugenia

Contribution ID: 47

Type: **not specified**

## ALICE Computing

*Friday 16 February 2024 08:00 (30 minutes)*

**Presenter:** CHAKABERIA, Irakli (Lawrence Berkeley National Lab. (US))



Contribution ID: 48

Type: **not specified**

## **Recents progress in quarkonia dynamics with open quantum systems**

*Friday 16 February 2024 08:30 (30 minutes)*

**Presenter:** GOSSIAUX, Pol-Bernard

Contribution ID: 49

Type: **not specified**

## Recent open HF results from ALICE

*Friday 16 February 2024 09:00 (30 minutes)*

**Presenter:** THOMAS, Deepa (University of Texas at Austin (US))

Contribution ID: 50

Type: **not specified**

## **Study of heavy-flavor jet fragmentation using angular correlations with the ALICE experiment at the LHC**

*Friday 16 February 2024 09:30 (30 minutes)*

**Presenter:** FLORES, Amanda (University of Texas at Austin (US))

Contribution ID: 51

Type: **not specified**

## **LHCb Overview**

*Friday 16 February 2024 10:30 (30 minutes)*

**Presenter:** DURHAM, John Matthew (Los Alamos National Laboratory)

Contribution ID: 52

Type: **not specified**

## Hadronization at LHCb

*Friday 16 February 2024 11:00 (30 minutes)*

**Presenter:** BERKEY, Julie Lane Marie (Los Alamos National Laboratory (US))

Contribution ID: 53

Type: **not specified**

## Exploring Strong Interactions in Three-Hadron Systems at the LHC

*Friday 16 February 2024 11:30 (30 minutes)*

**Presenter:** SINGH, Bhawani (Technische Universitaet Muenchen (DE))

Contribution ID: 54

Type: **not specified**

## **Revisiting the computation of transient hydrodynamic transport coefficients with hadron-resonance gas and thermal-mass quasiparticle models**

*Friday 16 February 2024 17:30 (30 minutes)*

**Presenter:** SOARES ROCHA, Gabriel

Contribution ID: 55

Type: **not specified**

## Overview of PHENIX spin results

*Friday 16 February 2024 18:00 (30 minutes)*

**Presenter:** SEIDL, Ralf



Contribution ID: 56

Type: **not specified**

# Path-length dependence of jet quenching at the LHC & RHIC

*Friday 16 February 2024 18:30 (30 minutes)*

**Presenter:** SICKLES, Anne Marie (Univ. Illinois at Urbana Champaign (US))

Contribution ID: 57

Type: **not specified**

## QGP Signatures - Then and Now

*Friday 16 February 2024 19:00 (30 minutes)*

**Presenter:** HARRIS, John William (Yale University (US))