# 2023 RHIC/AGS Annual Users' Meeting

### **Report of Contributions**

Contribution ID: 196 Type: not specified

#### **Welcome Remarks**

Thursday, 3 August 2023 09:00 (10 minutes)

**Presenter:** HEWETT, JoAnne (Brookhaven National Laboratory, Lab Director)

Session Classification: Plenary Session I.A - Marzia Rosati, UEC Chair-Elect, Iowa State

University - Berkner Hall Auditorium

Contribution ID: 197 Type: not specified

#### Nuclear Physics at BNL - via Zoom

Thursday, 3 August 2023 09:10 (25 minutes)

**Presenter:** GAO, Haiyan (Brookhaven National Laboratory, Associate Laboratory Director for Nuclear & Particle Physics)

**Session Classification:** Plenary Session I.A - Marzia Rosati, UEC Chair-Elect, Iowa State University - Berkner Hall Auditorium

Contribution ID: 198 Type: not specified

#### C.A.D. Run 23 Report

Thursday, 3 August 2023 09:35 (25 minutes)

Presenter: SHREY, Travis (Brookhaven National Laboratory, CAD Run 23 Coordinator)

Session Classification: Plenary Session I.A - Marzia Rosati, UEC Chair-Elect, Iowa State

University - Berkner Hall Auditorium

Contribution ID: 199 Type: not specified

#### sPHENIX Run 23 Report

Thursday, 3 August 2023 10:00 (25 minutes)

**Presenter:** BATHE, Stefan (Baruch College, CUNY, & RBRC)

Session Classification: Plenary Session I.A - Marzia Rosati, UEC Chair-Elect, Iowa State

University - Berkner Hall Auditorium

Contribution ID: 200 Type: not specified

#### STAR Run 23 Report

Thursday, 3 August 2023 10:25 (25 minutes)

**Presenter:** TU, Kong (Brookhaven National Laboratory )

Session Classification: Plenary Session I.A - Marzia Rosati, UEC Chair-Elect, Iowa State

University - Berkner Hall Auditorium

Contribution ID: 202 Type: not specified

### **Report from DOE**

Thursday, 3 August 2023 11:15 (30 minutes)

Presenter: HALLMAN, Timothy (Department of Energy, Office of Nuclear Physics)

Session Classification: Plenary Session I.B - Xuan Li, Los Alamos National Laboratory

Contribution ID: 203 Type: not specified

#### **Beam Energy Scan Theory**

Thursday, 3 August 2023 11:45 (30 minutes)

Presenter: STEPHANOV, Mikhail (University of Illinois at Chicago)

Session Classification: Plenary Session I.B - Xuan Li, Los Alamos National Laboratory

Contribution ID: 205 Type: not specified

### **Annual Users' Meeting Group Picture**

Thursday, 3 August 2023 12:15 (15 minutes)

Session Classification: Plenary Session I.B - Xuan Li, Los Alamos National Laboratory

Contribution ID: 206 Type: not specified

### **QGP Theory Talk**

Thursday, 3 August 2023 14:00 (25 minutes)

**Presenter:** MEHTAR-TANI, Yacine (Brookhaven National Laboratory)

Session Classification: Plenary Session I.C - Megan Connors, Georgia State University

Contribution ID: 207 Type: not specified

### Report on the DOE Program for Heavy Ions - via Zoom

Thursday, 3 August 2023 14:25 (25 minutes)

**Presenter:** HICKS, Kenneth (Department of Energy, Program Manager of Heavy Ion Nuclear Physics)

Session Classification: Plenary Session I.C - Megan Connors, Georgia State University

Contribution ID: 208 Type: not specified

### **PHENIX Highlights**

Thursday, 3 August 2023 15:20 (30 minutes)

Presenter: NOUICER, Rachid (Brookhaven National Laboratory)

Session Classification: Plenary Session I.D - Zhenyu Ye, UEC Chair, University of Illinois at

Chicago

Contribution ID: 209 Type: not specified

### sPHENIX Highlights

Thursday, 3 August 2023 15:50 (30 minutes)

Presenter: SICKLES, Anne (University of Illinois)

Session Classification: Plenary Session I.D - Zhenyu Ye, UEC Chair, University of Illinois at

Chicago

Contribution ID: 210 Type: not specified

### **STAR Highlights**

Thursday, 3 August 2023 16:20 (30 minutes)

**Presenter:** MA, Rongrong (Brookhaven National Laboratory)

Session Classification: Plenary Session I.D - Zhenyu Ye, UEC Chair, University of Illinois at

Chicago

Contribution ID: 211 Type: not specified

#### **Merit Awards & Thesis Awards**

Thursday, 3 August 2023 16:50 (30 minutes)

**Presenter:** HEWETT, JoAnne (Brookhaven National Laboratory, Lab Director)

Session Classification: Plenary Session I.D - Zhenyu Ye, UEC Chair, University of Illinois at

Chicago

Contribution ID: 212 Type: not specified

#### Thesis Award Flash Talk I

Thursday, 3 August 2023 17:20 (20 minutes)

**Presenter:** HODGES, Anthony (University of Illinois)

Session Classification: Plenary Session I.D - Zhenyu Ye, UEC Chair, University of Illinois at

Chicago

Contribution ID: 213 Type: not specified

#### Thesis Award Flash Talk II - via Zoom

Thursday, 3 August 2023 17:40 (20 minutes)

Presenter: ZHANG, Dingwei

Session Classification: Plenary Session I.D - Zhenyu Ye, UEC Chair, University of Illinois at

Chicago

Contribution ID: 214 Type: not specified

#### Report from NSF - via Zoom - Talk Cancelled

Friday, 4 August 2023 09:00 (20 minutes)

**Presenter:** OPPER, Allena (National Science Foundation, Program Director)

Session Classification: Plenary Session II.A - Rosi Reed, Lehigh University - Berkner Hall

Auditorium

Contribution ID: 215 Type: not specified

### **EIC Theory Talk**

Friday, 4 August 2023 09:20 (25 minutes)

**Presenter:** SCHENKE, Bjoern (Brookhaven National Laboratory )

Session Classification: Plenary Session II.A - Rosi Reed, Lehigh University - Berkner Hall

Auditorium

Contribution ID: 216 Type: not specified

#### **EIC Accelerator Development**

Friday, 4 August 2023 09:45 (25 minutes)

**Presenter:** WILLEKE, Ferdinand (Brookhaven National Laboratory )

Session Classification: Plenary Session II.A - Rosi Reed, Lehigh University - Berkner Hall

Auditorium

Contribution ID: 217 Type: not specified

#### EIC Project Status - via Zoom

Friday, 4 August 2023 10:10 (20 minutes)

Presenter: YECK, James (Brookhaven National Laboratory, Associate Laboratory Director for EIC)

Session Classification: Plenary Session II.A - Rosi Reed, Lehigh University - Berkner Hall

Auditorium

ePIC talk

Contribution ID: 218 Type: not specified

#### ePIC talk

Friday, 4 August 2023 11:00 (30 minutes)

Presenter: BRANDENBURG, Daniel (Ohio State University)

Session Classification: Plenary Session II.B - Marzia Rosati, UEC Chair- Elect. Iowa State

University

Contribution ID: 219 Type: not specified

#### **Detector 2 talk**

Friday, 4 August 2023 11:30 (30 minutes)

**Presenter:** LI, Wenliang (Jefferson Lab)

Session Classification: Plenary Session II.B - Marzia Rosati, UEC Chair- Elect. Iowa State

University

Contribution ID: 220 Type: not specified

#### **Discovery Park & Facilities**

Friday, 4 August 2023 12:00 (20 minutes)

Presenter: CANNELLA, Steven (Brookhaven National Laboratory, Manger Campus Planning &

Development Office)

Session Classification: Plenary Session II.B - Marzia Rosati, UEC Chair- Elect. Iowa State

University

Contribution ID: 221 Type: not specified

#### Poster Awards - & Flash Talk (TBD)

Friday, 4 August 2023 12:20 (20 minutes)

**Presenters:** ZAKHAROV, Vladislav (Stony Brook University & BNL); YE, Zhenyu (University of Illinois at Chicago)

**Session Classification:** Plenary Session II.B - Marzia Rosati, UEC Chair- Elect. Iowa State University

Contribution ID: 222 Type: not specified

#### **Business Meeting, UEC Elections**

Friday, 4 August 2023 12:40 (20 minutes)

Presenter: YE, Zhenyu (University of Illinois at Chicago)

Session Classification: Plenary Session II.B - Marzia Rosati, UEC Chair- Elect. Iowa State

University

Contribution ID: 223 Type: not specified

# FPGA Driven Machine Learning for Heavy Flavour Event Identification (remote)

Tuesday, 1 August 2023 14:30 (30 minutes)

Presenter: Dr KVAPIL, Jakub (Los Alamos National Laboratory)

Session Classification: AI/ML in Nuclear Physics - Building 490, Large Conference Room

Contribution ID: 224 Type: not specified

# A Closed-Form, Differentiable Metric on Event (remote)

Tuesday, 1 August 2023 10:00 (30 minutes)

**Presenter:** Dr LARKOSKI, Andrew (UCLA)

Session Classification: AI/ML in Nuclear Physics - Building 490, Large Conference Room

Contribution ID: 225 Type: not specified

## Al Based Reconstruction for Highly Granular Hadronic Calorimeter for EIC (remote)

Tuesday, 1 August 2023 13:30 (30 minutes)

Presenter: Dr KARKI, Bishnu (University of California, Riverside)

Session Classification: AI/ML in Nuclear Physics - Building 490, Large Conference Room

Contribution ID: 226 Type: not specified

#### ML Technique Overview in Nuclear or High Energy Physics (local)

Tuesday, 1 August 2023 09:00 (30 minutes)

Presenter: Dr REN, Yihui (Ray)

Session Classification: AI/ML in Nuclear Physics - Building 490, Large Conference Room

Contribution ID: 227 Type: not specified

#### **Tracking with a Graph Neural Network (remote)**

Tuesday, 1 August 2023 11:30 (30 minutes)

**Presenter:** Dr ROUGIER, Charline (ATLAS)

Session Classification: AI/ML in Nuclear Physics - Building 490, Large Conference Room

Contribution ID: 228 Type: not specified

# **Interpretable Machine Learning Methods for Jet Background Subtraction in Heavy Ion Collisions**

Tuesday, 1 August 2023 11:00 (30 minutes)

**Presenter:** Mr MENGEL, Tanner (University of Tennessee)

Session Classification: AI/ML in Nuclear Physics - Building 490, Large Conference Room

Contribution ID: 229 Type: not specified

# Construction and Fitting of a Deep Generative Hadronization Model (remote)

Tuesday, 1 August 2023 09:30 (30 minutes)

Presenter: Dr SIODMOK, Andrzej Konrad (CERN)

Session Classification: AI/ML in Nuclear Physics - Building 490, Large Conference Room

Contribution ID: 230 Type: not specified

# ML- enabled End-to-End Tracking Reconstruction and Trigger Detection

Tuesday, 1 August 2023 13:00 (30 minutes)

**Presenter:** BORCA-TASCIUC, Giorgian (Stony Brook University)

Session Classification: AI/ML in Nuclear Physics - Building 490, Large Conference Room

Contribution ID: 231 Type: not specified

#### **Recent Theoretical Developments on Jets**

Wednesday, 2 August 2023 09:00 (40 minutes)

**Presenter:** BARATA, João (BNL/IGFAE)

Session Classification: HF/Jets - Building 510, Physics Large Conference Room

Contribution ID: 232 Type: not specified

#### **Recent Jet Results from STAR**

Wednesday, 2 August 2023 09:40 (25 minutes)

Presenter: ROY, Diptanil (Rutgers University, New Jersey)

Session Classification: HF/Jets - Building 510, Physics Large Conference Room

Contribution ID: 233 Type: not specified

# Jet Quenching

Wednesday, 2 August 2023 10:25 (30 minutes)

**Presenter:** SHI, Shuzhe (McGill University)

Session Classification: HF/Jets - Building 510, Physics Large Conference Room

Contribution ID: 234 Type: not specified

# Progress Toward Jet Physics Measurements in sPHENIX

Wednesday, 2 August 2023 10:55 (25 minutes)

Presenter: HODGES, Anthony (University of Illinois)

Session Classification: HF/Jets - Building 510, Physics Large Conference Room

Contribution ID: 235 Type: not specified

# **LHC Jet Perspectives**

Wednesday, 2 August 2023 11:20 (25 minutes)

**Presenter:** FAN, Wenqing (Lawrence Berkeley National Laboratory)

**Session Classification:** HF/Jets - Building 510, Physics Large Conference Room

Contribution ID: 236 Type: not specified

#### **Recent Heavy Flavor Results from STAR**

Wednesday, 2 August 2023 13:45 (25 minutes)

Presenter: PROZOROVA, Veronika

Session Classification: HF/Jets - Building 510, Physics Large Conference Room

Contribution ID: 238 Type: not specified

#### **Recent Jet and Heavy Flavor Results from PHENIX**

Wednesday, 2 August 2023 14:10 (30 minutes)

Presenter: RICHFORD, Daniel (Baruch)

Session Classification: HF/Jets - Building 510, Physics Large Conference Room

Contribution ID: 239 Type: not specified

### **Heavy Flavor Energy Loss with JETSCAPE**

Wednesday, 2 August 2023 14:40 (25 minutes)

Presenter: VUJANOVIC, Gojko (Wayne State University)

Session Classification: HF/Jets - Building 510, Physics Large Conference Room

Contribution ID: 240 Type: not specified

### **LHC Quarkonia Perspectives**

Wednesday, 2 August 2023 15:25 (25 minutes)

**Presenter:** PARK, JaeBeom

**Session Classification:** HF/Jets - Building 510, Physics Large Conference Room

Contribution ID: 241 Type: not specified

# Progress Toward Heavy Flavor Measurements in sPHENIX

Wednesday, 2 August 2023 15:50 (25 minutes)

Presenter: OLIVEIRA DA SILVA, Antonio Carlos (Iowa State University)

Session Classification: HF/Jets - Building 510, Physics Large Conference Room

Contribution ID: 242 Type: not specified

### **End of Workshop**

Wednesday, 2 August 2023 16:15 (1 minute)

Session Classification: HF/Jets - Building 510, Physics Large Conference Room

Contribution ID: 243 Type: not specified

# **Opening Remarks**

Wednesday, 2 August 2023 09:00 (15 minutes)

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 244 Type: not specified

### **BES** Overview

Wednesday, 2 August 2023 09:15 (30 minutes)

Presenter: CEBRA, Daniel (University of California, Davis)

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 245 Type: not specified

# **Fentoscopy at BES**

Wednesday, 2 August 2023 09:45 (30 minutes)

**Presenter:** KHYZHNIAK, Yevheniia

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 246 Type: not specified

#### Flow at BES

Wednesday, 2 August 2023 10:30 (30 minutes)

Presenter: RACZ, Cameron (University of California @ Riverside)

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 247 Type: not specified

#### **BES CME**

Wednesday, 2 August 2023 11:00 (30 minutes)

Presenter: XU, Zhiwan

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 248 Type: not specified

### **BES Dileptons**

Wednesday, 2 August 2023 12:00 (30 minutes)

**Presenter:** YE, Zaochen (Rice university)

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 251 Type: not specified

#### **Fluctuations at BES**

Wednesday, 2 August 2023 11:30 (30 minutes)

Presenter: SWEGER, Zachary (University of California, Davis)

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 252 Type: not specified

### Femtoscopy, EoS & Other Theory

Wednesday, 2 August 2023 14:00 (30 minutes)

Presenter: PRATT, Scott (Michigan State University)

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 253 Type: not specified

# **Hydro Fluctuations**

Wednesday, 2 August 2023 14:30 (30 minutes)

Presenter: PRADEEP, Maneesha Sushama (University of Illinois at Chicago)

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 254 Type: not specified

# **Longitudinal Physics at BES**

Wednesday, 2 August 2023 15:00 (30 minutes)

**Presenter:** DU, Lipei (Ohio State University)

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 255 Type: not specified

# Experimental constraints on the initial stages of A+A collisions at lower energy

Wednesday, 2 August 2023 15:45 (30 minutes)

**Presenter:** (MAGDY) ABDELRAHMAN, Niseem (Research Associate)

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 256 Type: not specified

# Tracking the Baryon Number with Heavy-ion Collisions

Wednesday, 2 August 2023 16:15 (30 minutes)

Presenter: TSANG, Chun Yuen

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 257 Type: not specified

# **Open Discussion**

Wednesday, 2 August 2023 16:45 (15 minutes)

Session Classification: Beam Energy Scan - Building 488, Berkner Hall Room B

Contribution ID: 258 Type: not specified

#### sPHENIX Overview

Wednesday, 2 August 2023 09:00 (30 minutes)

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

**Session Classification:** New Detectors and Technologies - Building 490, Large Conference

Room

Contribution ID: 259 Type: not specified

### **STAR Forward Upgrade**

Wednesday, 2 August 2023 09:30 (20 minutes)

**Presenter:** LIANG, Xilin (University of California, Riverside)

Session Classification: New Detectors and Technologies - Building 490, Large Conference

Room

Contribution ID: 260 Type: not specified

#### **2nd EIC Detector**

Wednesday, 2 August 2023 09:50 (20 minutes)

**Presenter:** LEE, Sangbaek (Argonne National Laboratory)

Session Classification: New Detectors and Technologies - Building 490, Large Conference

Room

Contribution ID: 261 Type: not specified

#### ePIC Overview

Wednesday, 2 August 2023 10:40 (30 minutes)

**Presenter:** DALLA TORRE, Silvia (INFN, Trieste)

**Session Classification:** New Detectors and Technologies - Building 490, Large Conference

Room

Contribution ID: 262 Type: not specified

#### **ePIC ToF detectors**

Wednesday, 2 August 2023 11:10 (20 minutes)

Presenter: YANO, Satoshi (Hiroshima University )

Session Classification: Session: PID and Far Forward & Backward

Contribution ID: 263 Type: not specified

#### **ePIC Cherenkov Detectors**

Wednesday, 2 August 2023 11:30 (20 minutes)

**Presenter:** CHATTERJEE, Chandradoy (INFN Trieste)

Session Classification: Session: PID and Far Forward & Backward

Contribution ID: 264 Type: not specified

#### ePIC Far Forward and Far Backward Detectors

Wednesday, 2 August 2023 11:50 (20 minutes)

Presenter: JENTSCH, Alexander (Brookhaven National Laboratory)

Session Classification: Session: PID and Far Forward & Backward

Contribution ID: 265 Type: not specified

### sPHENIX Calorimetry

Wednesday, 2 August 2023 14:00 (20 minutes)

**Presenter:** JIANG, Hanpu (Columbia University)

**Session Classification:** Session: Calorimetry

Contribution ID: 266 Type: not specified

#### ePIC Hadronic Calorimetry

Wednesday, 2 August 2023 14:20 (20 minutes)

Presenter: SCHMIDT, Nicolas (Oak Ridge National Laboratory - (US))

**Session Classification:** Session: Calorimetry

Contribution ID: 267 Type: not specified

# ePIC Electromagnetic Calorimetry

Wednesday, 2 August 2023 14:40 (20 minutes)

**Presenter:** JI, Zhongling (UCLA)

**Session Classification:** Session: Calorimetry

Contribution ID: 268 Type: not specified

### sPHENIX Tracking

Wednesday, 2 August 2023 15:50 (20 minutes)

 $\textbf{Presenter:} \ \ \texttt{BERTAUX, Joseph (staff@purdue.edu;student@purdue.edu;member@purdue.edu;employee@purdue.edu)}$ 

Session Classification: Vertexing and Tracking

Contribution ID: 269 Type: not specified

#### **STAR Foward Tracker**

Wednesday, 2 August 2023 15:30 (20 minutes)

**Presenter:** WANG, Zhen (Shandong University)

Session Classification: Vertexing and Tracking

Contribution ID: 270 Type: not specified

# ePIC Tracking

Wednesday, 2 August 2023 16:10 (20 minutes)

**Presenter:** LI, Shujie (Lawrence Berkeley National Laboratory)

Session Classification: Vertexing and Tracking

Contribution ID: 271 Type: not specified

#### **ePIC Readout Electronics**

Wednesday, 2 August 2023 16:30 (20 minutes)

**Presenter:** BARBOSA, Fernando (JLab)

**Session Classification:** Session: DAQ and Polarimetry

Contribution ID: 272 Type: not specified

# **EIC Polarimetry**

Wednesday, 2 August 2023 16:50 (20 minutes)

Presenter: ZHANG, Zhengqiao

**Session Classification:** Session: DAQ and Polarimetry

Contribution ID: 273 Type: not specified

#### **Introduction Talks from Invited Speakers**

Tuesday, 1 August 2023 15:00 (1h 10m)

**Presenters:** BARBER, Charles (National Science Foundation); NATTRASS, Christine (University of Tennessee, Knoxville); PONCE, Iris (Yale University); CARPENTER, Kitt (Vanderbilt University); SANCHEZ, Shua (MIT); QUICHOCHO, Xandria (Texas State); SWEGER, Zachary (University of California, Davis)

Session Classification: Diversity & Inclusion, Building 490, Large Conference Room

Contribution ID: 274 Type: not specified

#### **Round-Table Panel Discussion**

Tuesday, 1 August 2023 16:20 (40 minutes)

Session Classification: Diversity & Inclusion, Building 490, Large Conference Room

Contribution ID: 275 Type: not specified

### **Overview of Spin Physics**

Tuesday, 1 August 2023 09:00 (30 minutes)

Presenter: HATTA, Yoshitaka (BNL)

Session Classification: EIC Physics - Building 510, Physics Large Seminar Room

Contribution ID: 276 Type: not specified

### **Neutron Spin with Double-Spectator Tagging**

Tuesday, 1 August 2023 09:30 (20 minutes)

Presenter: PYBUS, Jackson (MIT)

Session Classification: EIC Physics - Building 510, Physics Large Seminar Room

Contribution ID: 277 Type: not specified

#### **Gluon Polarization from Global Analyses**

Tuesday, 1 August 2023 09:50 (20 minutes)

**Presenter:** COCUZZA, Christopher (Temple University)

Session Classification: EIC Physics - Building 510, Physics Large Seminar Room

Contribution ID: 278 Type: not specified

### **Diffractive Physics: LHC and RHIC Synergies**

Tuesday, 1 August 2023 10:30 (30 minutes)

Diffractive Physics: LHC and RHI  $\dots$ 

**Presenter:** KOVCHEGOV, Yuri (The Ohio State University)

Session Classification: EIC Physics - Building 510, Physics Large Seminar Room

Contribution ID: 279 Type: not specified

# **Diffractive Physics from LHC to EIC**

Tuesday, 1 August 2023 11:00 (30 minutes)

Presenter: KIM, Minjung (Other@lbl.gov;Guest@lbl.gov)

Session Classification: EIC Physics - Building 510, Physics Large Seminar Room

Contribution ID: 280 Type: not specified

# Jets in eP and eA

Tuesday, 1 August 2023 11:30 (20 minutes)

**Presenter:** ADKINS, Kevin (Morehead State University)

Session Classification: EIC Physics - Building 510, Physics Large Seminar Room

Contribution ID: 281 Type: not specified

### **Extracting Heavy Flavor Particles with ePIC**

Tuesday, 1 August 2023 11:50 (20 minutes)

Presenter: LI, Xuan (Los Alamos National Laboratory)

Session Classification: EIC Physics - Building 510, Physics Large Seminar Room

Contribution ID: 282 Type: not specified

### **End of Workshop**

Tuesday, 1 August 2023 12:10 (1 minute)

Session Classification: EIC Physics - Building 510, Physics Large Seminar Room