# 3rd JETSCAPE Winter School and Workshop 2020

# Report of Contributions

https://indico.bnl.gov/e/6998

Contribution ID: **59** Type: **not specified**

# Welcome

**Presenters:** MAJUMDER, Abhijit (Wayne State University); NATTRASS, Christine (University of Tennessee, Knoxville)

**Session Classification:** JETSCAPE School Day 1

Contribution ID: **60** Type: **not specified**

# Big picture overview I (Theory)

**Presenter:** FRIES, Rainer (Texas A&M University)

**Session Classification:** JETSCAPE School Day 1

Contribution ID: **61** Type: **not specified**

# Big picture overview II (Experiment)

**Presenter:** PEREPELITSA, Dennis (University of Colorado Boulder)

**Session Classification:** JETSCAPE School Day 1

Contribution ID: **62** Type: **not specified**

# The JETSCAPE Framework

**Presenter:** MULLIGAN, James (Yale University)

**Session Classification:** JETSCAPE School Day 1

Contribution ID: **63** Type: **not specified**

# Working Session I: The Framework

Includes working lunch

**Session Classification:** JETSCAPE School Day 1

Contribution ID: **64** Type: **not specified**

# Fluid dynamics overview

**Presenter:** SHEN, Chun (Wayne State University)

**Session Classification:** JETSCAPE School Day 1

Contribution ID: **65** Type: **not specified**

# Working Session I: Bulk Dynamics

**Session Classification:** JETSCAPE School Day 1

Contribution ID: **66** Type: **not specified**

# JETSCAPE Physics (Hard Probes)

**Presenter:** VUJANOVIC, Gojko (Wayne State University)

**Session Classification:** JETSCAPE School Day 2

Contribution ID: **67** Type: **not specified**

# Working Session III

**Session Classification:** JETSCAPE School Day 2

Contribution ID: **68** Type: **not specified**

# JETSCAPE Physics (Hard Probes and bulk)

**Presenter:** TACHIBANA, Yasuki (Wayne State University)

**Session Classification:** JETSCAPE School Day 2

Contribution ID: **69** Type: **not specified**

# Working Session IV

Includes working lunch

**Session Classification:** JETSCAPE School Day 2

Contribution ID: **70** Type: **not specified**

# Statistical Analysis Bulk

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

**Session Classification:** JETSCAPE School Day 2

Contribution ID: **72** Type: **not specified**

# Working Session V

**Session Classification:** JETSCAPE School Day 2

Contribution ID: **73** Type: **not specified**

# Big picture overview VII - GPUs

**Presenter:** Dr AUSTIN, Harris (ORNL)

**Session Classification:** JETSCAPE School Day 2

Contribution ID: **74** Type: **not specified**

# New directions with SPHENIX

**Presenter:** ROLAND, Gunther (MIT)

**Session Classification:** JETSCAPE School Day 2

Contribution ID: **75** Type: **not specified**

# Statistical Analysis Jets

**Presenter:** Ms CHEN, Yi (MIT)

**Session Classification:** JETSCAPE School Day 3

Contribution ID: **76** Type: **not specified**

# Working Session VI

**Session Classification:** JETSCAPE School Day 3

Contribution ID: **77** Type: **not specified**

# Q&A with all Speakers

**Session Classification:** JETSCAPE School Day 3

Contribution ID: **78** Type: **not specified**

# Computing opportunities at ORNL

*Wednesday, 18 March 2020 12:45 (45 minutes)*

**Presenter:** MESSER, Bronson (Oak Ridge National Laboratory)

**Session Classification:** JETSCAPE Executive Committee Meeting

Contribution ID: **79** Type: **not specified**

# Other Business

*Wednesday, 18 March 2020 13:30 (45 minutes)*

**Presenters:** MAJUMDER, Abhijit (Wayne State University); GALE, Charles (McGill University)

**Session Classification:** JETSCAPE Executive Committee Meeting

Contribution ID: **80** Type: **not specified**

# Welcome

*Wednesday, 18 March 2020 14:15 (10 minutes)*

**Presenters:** MAJUMDER, Abhijit (Wayne State University); NATTRASS, Christine (University of Tennessee, Knoxville)

**Session Classification:** Workshop Session II

Contribution ID: **81** Type: **not specified**

# Nuclear modification of jet shape for inclusive jets and photon-jets at the LHC

*Wednesday, 18 March 2020 14:25 (30 minutes)*

**Presenter:** QIN, Guang-You (Central China Normal University)

**Session Classification:** Workshop Session II

Contribution ID: **82** Type: **not specified**

# Novel tools for measuring jets in heavy-ion collisions

*Wednesday, 18 March 2020 14:55 (30 minutes)*

**Presenter:** HAVENER, LAURA (Columbia University)

**Session Classification:** Workshop Session II

Contribution ID: **83** Type: **not specified**

# GPUs

*Thursday, 19 March 2020 16:00 (40 minutes)*

**Presenter:** HARRIS, Austin (Oak Ridge National Laboratory)

**Session Classification:** Workshop Session VII

Contribution ID: **84** Type: **not specified**

# Light nuclei production in AA, pA, pp: what can one study with JETSCAPE

*Wednesday, 18 March 2020 15:55 (30 minutes)*

**Presenter:** OLIINYCHENKO, Dmytro (Lawrence Berkeley National Laboratory)

**Session Classification:** Workshop Session III

Contribution ID: **85** Type: **not specified**

# Jet substructure and hadronization at RHIC and the LHC

*Wednesday, 18 March 2020 16:25 (30 minutes)*

**Presenter:** OSBORN, Joe (ORNL)

**Session Classification:** Workshop Session III

Contribution ID: **86** Type: **not specified**

# Rivet

*Thursday, 19 March 2020 09:00 (35 minutes)*

**Presenter:** LÖNNBLAD, Leif (Lund University (SE))

**Session Classification:** Workshop Session IV

Contribution ID: **87** Type: **not specified**

# Implementation of jet and jet-hadron analyses in Rivet

*Thursday, 19 March 2020 09:35 (30 minutes)*

**Presenter:** OLIVEIRA DA SILVA, Antonio Carlos (University of Tennessee - Knoxville)

**Session Classification:** Workshop Session IV

Contribution ID: **88** Type: **not specified**

# Recent jet measurements in ALICE

**Presenter:** EHLERS, Raymond (Oak Ridge National Lab)

**Session Classification:** Workshop Session IV

Contribution ID: **89** Type: **not specified**

# Shine Reconstruction chain

**Presenter:** Mr ADHIKARY, Haradhan (Jan Kochanowski University, Kielce)

**Session Classification:** Workshop Session V

Contribution ID: **90** Type: **not specified**

# Dijet invariant mass with ALICE

*Thursday, 19 March 2020 10:55 (15 minutes)*

**Presenter:** Mr SAARIMÄKI, Oskari (Helsinki Institute of Physics (FI))

**Session Classification:** Workshop Session V

Contribution ID: **91** Type: **not specified**

# How and Why to Address the Invisible Problems of Bias in Physics

*Thursday, 19 March 2020 11:40 (35 minutes)*

**Presenter:** BOHON, Stephanie (University of Tennessee Knoxville)

**Session Classification:** Workshop Session V

Contribution ID: **92** Type: **not specified**

# small systems

*Thursday, 19 March 2020 13:00 (35 minutes)*

**Presenter:** BELMONT, Ron (University of North Carolina Greensboro)

**Session Classification:** Workshop Session VI

Contribution ID: **93** Type: **not specified**

# Medium response and bulk fluid velocity effect in jet quenching

*Thursday, 19 March 2020 13:35 (30 minutes)*

**Presenter:** TACHIBANA, Yasuki (Wayne State University)

**Session Classification:** Workshop Session VI

Contribution ID: **94** Type: **not specified**

# An experimentalist view of jet structure studies

*Thursday, 19 March 2020 10:05 (35 minutes)*

**Presenter:** SALUR, Sevil (Rutgers University)

**Session Classification:** Workshop Session IV

Contribution ID: **95** Type: **not specified**

# TBa

**Presenter:** NAGLE, James (University of Colorado)

**Session Classification:** Workshop Session VII

Contribution ID: **96** Type: **not specified**

# Separating quark and gluon jet distributions in heavy ions

*Thursday, 19 March 2020 15:25 (35 minutes)*

**Presenter:** BREWER, Jasmine (Massachusetts Institute of Technology)

**Session Classification:** Workshop Session VII

Contribution ID: **97** Type: **not specified**

# Self-correlations in fluctuation study of heavy ion collisions

*Thursday, 19 March 2020 11:10 (15 minutes)*

**Presenter:** DE, Aritra

**Session Classification:** Workshop Session V

Contribution ID: **98** Type: **not specified**

# Lido for inclusive jet analysis

*Thursday, 19 March 2020 11:25 (15 minutes)*

**Presenter:** FAN, Wenkai

**Session Classification:** Workshop Session V

Contribution ID: **99** Type: **not specified**

# Prompt gamma-jet and di-jet via correlations in Heavy Ion Physics in Large and Small Systems

*Friday, 20 March 2020 09:00 (35 minutes)*

**Presenter:** FRANTZ, Justin (Ohio University)

**Session Classification:** Workshop Session VIII

Contribution ID: **100** Type: **not specified**

# Quantifying the QGP

*Thursday, 19 March 2020 14:55 (30 minutes)*

**Presenter:** EVERETT, Derek (Ohio State)

**Session Classification:** Workshop Session VII

Contribution ID: **101** Type: **not specified**

# QGP tomography with DREENA framework

*Friday, 20 March 2020 10:10 (15 minutes)*

**Presenter:** ZIGIC, Dusan (Institute of Physics Belgrade)

**Session Classification:** Workshop Session VIII

Contribution ID: **102** Type: **not specified**

# Jet and medium evolution in Pb-Pb collisions at the LHC energies from the EPOS initial state

*Friday, 20 March 2020 10:25 (15 minutes)*

**Presenter:** KARPENKO, Iurii (FNSPE CTU Prague)

**Session Classification:** Workshop Session VIII

Contribution ID: **103** Type: **not specified**

# Medium Induced Jet Modification Studies via Two Particle Correlations in PHENIX

**Presenter:** HODGES, Anthony (Georgia State University)

**Session Classification:** Workshop Session IX

Contribution ID: **104** Type: **not specified**

# Performance Characterization Studies of sPHENIX Hadronic Calorimeter Scintillating Tiles at Georgia State University

**Presenter:** ALI, Saif

**Session Classification:** Workshop Session IX

Contribution ID: **105** Type: **not specified**

# TBA

**Presenter:** KIM, Byunggyu

**Session Classification:** Workshop Session IX

Contribution ID: **106** Type: **not specified**

# Charged Particle Momentum Resolution of the sPHENIX TPC

*Friday, 20 March 2020 11:00 (15 minutes)*

**Presenter:** KLEST, Henry (Stony Brook University)

**Session Classification:** Workshop Session IX

Contribution ID: **107** Type: **not specified**

# Photon-jet correlation in P-P and A-A collisions

*Friday, 20 March 2020 11:15 (30 minutes)*

**Presenter:** SIRIMANNA, Chathuranga (Wayne State University)

**Session Classification:** Workshop Session IX

Contribution ID: **108** Type: **not specified**

# Parton energy loss in a hard-soft factorized approach

*Friday, 20 March 2020 11:45 (30 minutes)*

**Presenter:** DAI, Tianyu

**Session Classification:** Workshop Session IX

Contribution ID: **109** Type: **not specified**

# Single-particle heavy-flavor observables and correlations as probes of the heavy-quark-medium coupling

*Thursday, 19 March 2020 14:05 (30 minutes)*

**Presenter:** KE, Weiyao (Duke University)

**Session Classification:** Workshop Session VI

Contribution ID: **110** Type: **not specified**

# sPHENIX

*Friday, 20 March 2020 09:35 (35 minutes)*

**Presenter:** ROLAND, Gunther (MIT)

**Session Classification:** Workshop Session VIII