Dennis V. Perepelitsa, *Curriculum Vitae*
2000 Colorado Ave, Boulder, CO 80309
dvp@colorado.edu / Duane F-213 / (303) 735-5493
CV Timestamp: Jan 2024

Employment

Associate Professor — 2022 – *present*
Physics Department, University of Colorado Boulder
(on sabbatical at Brookhaven National Laboratory, 2022–2023)

Assistant Professor — 2016 – 2022
Physics Department, University of Colorado Boulder

Goldhaber Fellow — 2013 – 2016
Physics Department, Brookhaven National Laboratory

Education

Ph.D. Physics, Columbia University — 2014
Area of study: Experimental nuclear physics and heavy ion collisions
Thesis: *Inclusive jet production in ultrarelativistic proton-nucleus collisions*
Thesis supervisor: Brian Cole

M.Phil. Physics, Columbia University — 2012

M.A. Physics, Columbia University — 2010
Physics Department Preceptor (head Teaching Fellow)

S.B. Physics, Massachusetts Institute of Technology — 2008
Thesis: *(n,n′γ) Reactions in* ^{63,65}*Cu and Background in* $0\nu\beta\beta$ *Experiments*
Thesis supervisor: Joseph Formaggio

S.B. Mathematics w/ Computer Science, Massachusetts Institute of Technology — 2008

Awards and Recognitions

Outstanding Physics Teacher Award, University of Colorado Boulder — 2021

Cottrell Scholar Award — 2020

D.O.E. Office of Science Early Career Award — 2017

MIT Laboratory for Nuclear Science, Lee Grodzins Award — 2016

Delivered the 508th Brookhaven Lecture — 2015

Blavatnik Awards for Young Scientists, Regional Award Finalist — 2015

ATLAS Thesis Award — 2014

RHIC/AGS Thesis Award — 2014

Goldhaber Distinguished Fellowship — 2013

External Funding (Federal sources)

"MRI Consortium: Development of an Event Plane Detector for the sPHENIX Experiment at the Relativistic Heavy Ion Collider"
PI: Rosi Reed, Co-PIs: Ron Belmont, Anders Knospe, Dennis Perepelitsa
National Science Foundation, Major Research Instrumentation (MRI) Program
Award amount: $572,067 Funding period: 8/1/2021 - 7/31/2023

"Experimental Relativistic Heavy Ion Physics at the University of Colorado Boulder"
PI: James Nagle, Co-PI: Dennis Perepelitsa
D.O.E. Office of Science, Office of Nuclear Physics
Award amount: $1,638,000 Funding period: 3/1/2021 - 2/29/2024

"Searching for Parton Energy Loss in Quark-Gluon Plasma Droplets"
Single PI: Dennis Perepelitsa
D.O.E. Office of Science, Early Career Research Program
Award amount: $750,000 Funding period: 9/1/2017 - 8/31/2022

External Funding (other)

"Commissioning the sPHENIX detector"
PI: Dennis Perepelitsa (sabbatical support)
Brookhaven National Laboratory
Award amount: $44,000 Funding period: 1/1/2023 - 5/31/2023

"Broadening and deepening the ESCIP network: Infusing computational science concepts into STEM courses through multidisciplinary instructor collaborative networks"
PI: D. Potoyan, Co-PIs: G. Stokes, et al (including Dennis Perepelitsa)
Research Corporation for Scientific Advancement, Cottrell Scholar Collaborative Award
Award amount: $25,000 Funding period: 10/1/2022 - 9/30/2024

"Next-Generation Experimental Probes of Hot and Dense Nuclear Matter"
Single PI: Dennis Perepelitsa
Research Corporation for Scientific Advancement, Cottrell Scholar Award
Award amount: $100,000 Funding period: 7/1/2020 - 6/31/2023

Scientific Leadership and Service

Physics Coordinator 2022 – *present*
sPHENIX Collaboration, BNL-RHIC

Co-Convener, Heavy Ion Working Group 2020 – 2022
ATLAS Collaboration, CERN-LHC

Co-Convenor, Jet Structure Topical Group 2016 – 2022
sPHENIX Collaboration, BNL-RHIC

Co-Convenor, Heavy Ions Jets working subgroup 2019 – 2020
ATLAS Collaboration, CERN-LHC

Co-Convenor, Heavy Ions Electroweak/Quarkonia working subgroup 2016 – 2019
ATLAS Collaboration, CERN-LHC

Presentations at DOE and Lab reviews, and Physics Advisory Committee meetings

"sPHENIX Beam Use Proposal"	NPP PAC Meeting, BNL, 2023
"sPHENIX Beam Use Proposal"	NPP PAC Meeting, BNL, 2022
"Inner HCal Scientific Case and Simulations"	sPHENIX IHCal Review, BNL, 2019
"Calorimeter Simulations"	sPHENIX PD-2/3 Review, BNL, 2019
"*b*-tagged Jet Performance and Physics"	sPHENIX DOE NP Science Review, BNL, 2015

Referee for Physics Letters B, European Physics Journal C, Nuclear Physics A & B, Physical Review Letters, Physical Review C

Reviewer for the U.S. Department of Energy (DOE, including panel reviews), U.S. National Science Foundation (NSF), Polish National Science Foundation (NCN), Hungarian National Research Development and Innovation Office (NRDI)

Meeting Organization

XXth International Conference on Ultra-relativistic Nucleus-Nucleus Collisions
Local Organizing Committee — September 2023, Houston, TX

11th International Conference on Hard and EM Probes of High-Energy Nuclear Collisions
International Advisory Committee — March 2023, Aschaffenburg, Germany

Predictions for sPHENIX (RBRC Workshop)
Organizer — July 2022, BNL

20th International Conference on Strangeness in Quark Matter
International Advisory Committee — June 2022, Busan, South Korea

8th International Workshop on Heavy Flavor Production in Nuclear Collisions
International Advisory Committee — July 2022, Torino, Italy

2021 Annual Meeting of the APS Four Corners Section
Local Organizer — October 2021, Boulder, CO (Virtual)

Particles and Nuclei International Conference 2021
Convener, Hot and dense matter physics session — September 2021, Lisbon, Portugal (Virtual)

9th Workshop of the APS Topical Group on Hadronic Physics,
Organizing Committee — April, 2021, Sacramento, CA (Virtual)

40th International Conference on High Energy Physics
Convener, Heavy Ion Session — July 2020, Prague, Czech Republic (Virtual)

Organizer, Small Systems Workshop
RHIC/AGS Annual Users Meeting — June 2019, Upton, NY

Local Organizing Committee, "13th International Workshop on High-pT Physics in the RHIC/LHC Era" — March 2019, Knoxville, TN

9th International Conference on Hard and EM netic Probes of High-Energy Nuclear Collisions
International Advisory Committee — October 2018, Aix-Les-Bains, France

Novel tools and observables for jet physics in heavy-ion collisions (CERN TH institute)
Organizer — August 2017, CERN

Organizer, 2017 National Nuclear Physics Summer School (NNPSS) July 2017, Boulder, CO

Organizer, "Exotic and Highly Asymmetric Collisions at RHIC" Workshop
RHIC/AGS Annual Users Meeting June 2015, Upton, NY

Teaching experience

Thermodynamics and Statistical Mechanics (Phys4230) Lecturer Spring 2024

Introduction to Quantum Mechanics and Its Applications (Phys2130) Lecturer Fall 2023

Classical Mechanics and Mathematical Methods II (Phys3210) Lecturer Fall 2021

Classical Mechanics and Mathematical Methods I (Phys2210) Lecturer
Spring 2021, Spring 2019, Fall 2017

Scientific Computing (Phys2600) Lecturer Spring 2020, Fall 2020

Quantum Mechanics I (Phys3220) Lecturer Fall 2019

General Physics II (Phys1120)
Spring 2018 (Lecturer), Spring 2017 (Lab organizer), Fall 2016 (Tutorial section)

Media and Public Outreach

The Conversation, "New technique uses near-miss particle physics to peer into quantum world - two physicists explain how they are measuring wobbling tau particles"
Published online at www.theconversation.com October 2023

Symmetry magazine, "Can light melt atoms into goo?"
Published online at www.symmetrymagazine.com August 2021

ATLAS Physics Briefing, "Studying "Little Bangs": exotic collisions probe the size of quark-gluon plasma"
Published online at www.atlas.cern July 2021

D.V.P quoted in, and CU Ph.D. students featured in, BNL article, "sPHENIX Assembly Shifts into Visible High Gear"
Published online at www.bnl.gov July 2021

Featured in *Longmont Leader* article, "Ph.D. students from University of Colorado Boulder help to build a new collider detector"
Published online at www.longmontleader.com June 2021

Quoted in *Defector* article, "Imagine The Awesome Face-Annihilating Powers Of The Antimatter-Freezing Laser"
Published online at www.defector.com April 2021

ATLAS Physics Briefing, "Z bosons zoom through quark-gluon plasma as jets quench"
Published online at www.atlas.cern August 2020

Quoted in *Astronomy* article, "Physicists create ultra-hot drops of 'quark soup' that dominated the very early universe"
Published online at www.astronomy.com December 2018

Quoted in *Gizmodo* article, "Could the Large Hadron Collider Collide a Sandwich?"
Published online at www.gizmodo.com May 2018

Quoted in *Gizmodo* article, "Biggest Quark Spotted in Whole New Way"
Published online at www.gizmodo.com December 2017

ATLAS Physics Briefing, "Photon-tagged jet quenching in the quark-gluon plasma"
Published online at www.atlas.cern October 2017

Featured in BNL article, "A Tale of Two Colliders, One Thesis, Two Awards-and a Physics Mystery"
Published online at www.bnl.gov March 2015

Selected Publications with Substantial Role

(*Full list of 500+ refereed publications may be found at:*
`www.inspirehep.net/author/profile/D.V.Perepelitsa.1`)

Reports, white papers, and proposals

R. Belmont et al (including D.V.P.), *Predictions for the sPHENIX physics program*, RBRC workshop summary paper, Nucl. Phys. A 1043 (2024) 122821

M. Arslandok et al (including D.V.P.), *Hot QCD White Paper*, nucl-ex/2303.17254, submitted to the DOE/NSF Nuclear Science Advisory Committee (NSAC) for the U.S. Long-Range Plan for Nuclear Science

W. Li, J. Noronha-Hostler, D.V.P. (organizers), et al., *High Density QCD in Small Collision Systems*, Snowmass 2021 Letter of Intent, EF-07 Energy Frontier - Heavy Ions

J. Adolfsson et al (including D.V.P.), *QCD Challenges from pp to A-A Collisions*, Report from the International QCD Workshop at Lund, Eur. Phys. J. A 56 (2020) 288

F. Antinori et al (including D.V.P.), *Thoughts on opportunities in high-energy nuclear collisions*, Summary of Mont Sainte Odile post-Quark Matter meeting, hep-ph/1903.04289

Z. Citron et al (including D.V.P.), *Future physics opportunities for high-density QCD at the LHC with heavy-ion and proton beams*, CERN Yellow Report, hep-ph/1812.06772

H. A. Andrews et al (including D.V.P.), *Novel tools and observables for jet physics in heavy-ion collisions*, CERN Theory institute report, J. Phys. G 47 (2020) 065102

PHENIX Collaboration, *An Upgrade Proposal from the PHENIX Collaboration*, nucl-ex/1501.06197, submitted to the Department of Energy Office of Nuclear Physics

Public Preliminary results

ATLAS Collaboration, *Charged-hadron yield measurements in photo-nuclear collisions using 5.02 TeV Pb+Pb data with ATLAS*, ATLAS-CONF-2023-059,
`https://cds.cern.ch/record/2871729`

ATLAS Collaboration, *Search for the quark-gluon plasma diffusion wake via measurements of jet-hadron correlations in photon-jet events in Pb+Pb collisions at* $\sqrt{s_{\mathrm{NN}}} = 5.02$ *TeV with the ATLAS detector*, ATLAS-CONF-2023-054, `http://cds.cern.ch/record/2870221`

ATLAS Collaboration, *Measurement of isolated photon plus multi-jet correlations in Pb+Pb and pp collisions at 5.02 TeV with ATLAS*, ATLAS-CONF-2023-008,

http://cds.cern.ch/record/2854837

ATLAS Collaboration publications

ATLAS Collaboration, *Measurements of longitudinal flow decorrelations in pp and Xe+Xe collisions with the ATLAS detector*, nucl-ex/2308.16745, Submitted Phys. Rev. Lett.

ATLAS Collaboration, *Comparison of inclusive and photon-tagged jet suppression in 5.02 TeV Pb+Pb collisions with ATLAS*, Phys. Lett. B 846 (2023) 138154

ATLAS Collaboration, *Strong constraints on jet quenching in centrality-dependent p+Pb collisions at 5.02 TeV from ATLAS*, Phys. Rev. Lett. 131 (2023) 072301

ATLAS Collaboration, *Measurement of the nuclear modification factor for muons from charm and bottom hadrons in Pb+Pb collisions at 5.02 TeV with the ATLAS detector*, Phys. Lett. B 829 (2022) 137077

ATLAS Collaboration, *Two-particle azimuthal correlations in photonuclear ultraperipheral Pb+Pb collisions at 5.02 TeV with ATLAS*, Phys. Rev. C 104 (2021) 014903

ATLAS Collaboration, *Medium-induced modification of Z-tagged charged particle yields in Pb+Pb collisions at 5.02 TeV with the ATLAS detector*, Phys. Rev. Lett. 126 (2021) 072301

ATLAS Collaboration, *Measurement of azimuthal anisotropy of muons from charm and bottom hadrons in Pb+Pb collisions at* $\sqrt{s_{\mathrm{NN}}} = 5.02$ *TeV with the ATLAS detector*, Phys. Lett. B 807 (2020) 135595

ATLAS Collaboration, *Transverse momentum and process dependent azimuthal anisotropies in* $\sqrt{s_{\mathrm{NN}}} = 8.16$ *TeV p+Pb collisions with the ATLAS detector*, Eur. Phys. J. C80 (2020) 73

ATLAS Collaboration, *Measurement of azimuthal anisotropy of muons from charm and bottom hadrons in pp collisions at* $\sqrt{s} = 13$ *TeV with the ATLAS detector*, Phys. Rev. Lett. 124 (2020) 082301

ATLAS Collaboration, *Measurement of prompt photon production in* $\sqrt{s_{\mathrm{NN}}} = 8.16$ *TeV p+Pb collisions with ATLAS*, Phys. Lett. B 796 (2019) 230

ATLAS Collaboration, *Comparison of fragmentation functions for light-quark- and gluon-dominated jets from pp and Pb+Pb collisions in ATLAS*, Phys. Rev. Lett. 123 (2019) 042001

ATLAS Collaboration, *Measurement of photon-jet* p_{T} *correlations in 5.02 TeV Pb+Pb and pp collisions with ATLAS*, Phys. Lett. B 789 (2019) 167

ATLAS Collaboration, *Observation of centrality-dependent acoplanarity for muon pairs produced via two-photon scattering in Pb+Pb collisions at* $\sqrt{s_{\mathrm{NN}}} = 5.02$ TeV *with the ATLAS detector*, Phys. Rev. Lett. 121 (2018) 212301

ATLAS Collaboration, *Measurement of jet fragmentation in 5.02 TeV proton–lead and proton–proton collisions with the ATLAS detector*, Nucl. Phys. A 978 (2018) 65

ATLAS Collaboration, *Measurement of the dependence of transverse energy production at large pseudorapidity on the hard-scattering kinematics of proton–proton collisions at* $\sqrt{s} = 2.76$ TeV *with ATLAS*, Phys. Lett. B 756 (2016) 10

ATLAS Collaboration, *Measurement of the centrality dependence of the charged particle pseu-*

dorapidity distribution in proton-lead collisions at $\sqrt{s_{\rm NN}} = 5.02$ TeV *with the ATLAS detector*, Eur. Phys. J. C 76 (2016) 199

ATLAS Collaboration, *Measurement of charged-particle spectra in Pb+Pb collisions at* $\sqrt{s_{\rm NN}} =$ 2.76 TeV *with the ATLAS detector at the LHC*, J. High. Energy. Phys. 1509 (2015) 050

ATLAS Collaboration, *Measurements of the nuclear modification factor for jets in Pb+Pb collisions at* $\sqrt{s_{\rm NN}} = 2.76$ TeV *with the ATLAS detector*, Phys. Rev. Lett. 114 (2015) 072302

ATLAS Collaboration, *Centrality and rapidity dependence of inclusive jet production in* $\sqrt{s_{\rm NN}} =$ 5.02 TeV *proton–lead collisions with the ATLAS detector*, Phys. Lett. B 748 (2015) 392

PHENIX Collaboration publications

PHENIX Collaboration, *Systematic study of nuclear effects in p+Al, p+Au, d+Au, and* ^{3}*He+Au collisions at* $\sqrt{s_{\rm NN}} = 200$ *GeV using* π^0 *production*, Phys. Rev. C 105 (2022) 064902

PHENIX Collaboration, *Measurements of multiparticle correlations in d+Au collisions at 200, 62.4, 39, and 19.6 GeV and p+Au collisions at 200 GeV and implications for collective behavior* Phys. Rev. Lett. 120 (2018) 062302

PHENIX Collaboration, *Centrality-dependent modification of jet-production rates in deuteron-gold collisions at* $\sqrt{s_{\rm NN}} = 200$ GeV, Phys. Rev. Lett. 116 (2016) 122301

PHENIX Collaboration, *Centrality categorization for* $R_{\rm p(d)+A}$ *in high-energy collisions*, Phys. Rev. C 90 (2014) 034902

Few-author publications

S.H. Lim, Q. Hu, R. Belmont, K.K. Hill, J.L. Nagle, D.V.P., *Examination of Flow and Non-Flow Factorization Methods in Small Collision Systems*, Phys. Rev. C100 (2019) 024908

M. Alvioli, L. Frankfurt, D.V.P., M. Strikman, *Global analysis of color fluctuation effects in proton- and deuteron-nucleus collisions at RHIC and the LHC*, Phys. Rev. D 98 (2018) 071502

J.L. Nagle, R. Belmont, K. Hill, D.V.P., J. Orjuela Koop, P. Yin, Z-W. Lin, D. McGlinchey, *Are minimal conditions for collectivity met in e+e- collisions?*, Phys. Rev. C 97 (2018) 024909

J.T. Mitchell, D.V.P., M.J. Tannenbaum, P. W. Stankus, *Tests of constituent-quark generation methods which maintain both the nucleon center of mass and the desired radial distribution in Monte Carlo Glauber models* , Phys. Rev. C93 (2016) 054910

D. McGlinchey, J.L. Nagle, D.V.P., *Consequences of high-x proton size fluctuations in small collision systems at RHIC*, Phys. Rev. C94 (2016) 024915

M. Alvioli, B. Cole, L. Frankfurt, D.V.P., M. Strikman, *Evidence for x-dependent proton color fluctuations in pA collisions at the CERN Large Hadron Collider*, Phys. Rev. C93 (2016) 011902

D.V.P., P. Steinberg, *Calculation of centrality bias factors in p+*A *collisions based on a positive correlation of hard process yields with underlying event activity*, nucl-ex/1412.0976, submitted to Phys. Rev. C

Other experimental publications

Y. Chen et al (including D.V.P.), *Jet energy spectrum and substructure in e+e- collisions at 91.2 GeV with ALEPH Archived Data*, JHEP 06 (2022) 008

C. A. Aidala et al (including D.V.P.), *Design and Beam Test Results for the 2D Projective sPHENIX Electromagnetic Calorimeter Prototype*, IEEE Trans. Nucl. Sci. 68 (2021) 173

M. S. Boswell, S. R. Elliott, D.V.P., M. Devlin, N. Fotiades, R. O. Nelson, T. Kawano, and V. E. Guiseppe, *Neutron inelastic scattering in natural Cu as a background in neutrinoless double-β decay experiments*, Phys. Rev. C87 (2013) 064607

V.E. Guiseppe, M. Devlin, S.R. Elliott, N. Fotiades, A. Hime, D.-M. Mei, R.O. Nelson, D.V.P., *Neutron inelastic scattering and reactions in natural Pb as a background in neutrinoless double-beta decay experiments*, Phys. Rev. C79 (2009) 054604

Colloquiua, Public Lectures and Symposia

Physics Department Colloquium, Idaho State University Apr 2023, Pocatello, ID
"Quark-Gluon Plasma: The First Liquid in the Universe"

Physics Department Colloquium, UMass Amherst Oct 2022, Amherst, MA
"The First Liquid in the Universe: Experimental Studies of the Quark-Gluon Plasma"

Physics Department Colloquium, Lehigh University Oct 2022, Bethelehem, PA
"Quark-Gluon Plasma: The First Liquid in the Universe"

Physics & Astronomy Department Colloquium, Georgia State U. Sep 2021, Atlanta, GA
"Exploring the Hottest Matter in the Universe with Ultra-Relativistic Heavy Ion Collisions"

Physics Department Colloquium, Colorado State University February 2020, Ft. Collins, CO
"Exploring the Hottest Matter in the Universe with Ultra-Relativistic Heavy Ion Collisions"

Physics Department Colloquium, University of Kansas Oct. 2019, Lawrence, KS
"Photon+Jet Probes of the Quark-Gluon Plasma Created in Ultra-Relativistic Heavy Ion Collisions"

9th Intl. Conf. on Hard and EM Probes of High-Energy Nuclear Collisions Sept. 2018, CERN
Student Day Lecture, Physics of Small Collision Systems

Lee Grodzins Colloquium, MIT Laboratory for Nuclear Science Sept. 2016, Boston, MA
"Novel probes of the proton wavefunction through collisions with nuclei"

Blavatnik Science Symposium, New York Academy of Sciences July 2016, New York, NY
"Back to the Beginning: Using Man-Made Big Bangs to Study the Forces that Bind Matter Together"

Physics Colloquium, Penn State University February 2016, State College, PA
"Creating the hottest matter in the universe with nuclear collisions at the CERN LHC"

Physics Colloquium, University of Colorado Boulder February 2016, Boulder, CO
"Jet and photon probes of hot, dense nuclear matter at the Large Hadron Collider"

508th Brookhaven Lecture, Brookhaven National Laboratory October 2015, Upton, NY
"Using Nuclei to Catch Shape-Shifting Protons in the Act"

Invited Seminars

University of Jyvaskyla, Physics Seminar — Jun. 2023, Jyvaskyla, Finland
"Initial and final state effects on hard partons in small collision systems"

Baruch College CUNY, Physics Seminar — Apr. 2023, New York City, NY
"Parton-medium interactions in large and small heavy ion collisions with ATLAS"

Duke University, QCD Seminar — Nov. 2022, Durham, NC
"The Long Range Plan for Nuclear Science: A Perspective on Hot QCD Priorities"

New York University, Experimental Particle Physics Seminar — Oct. 2022, New York, NY
"The First Liquid in the Universe: Studying the Quark-Gluon Plasma with ATLAS"

Yale University, Nuclear/Particle/Astrophysics Seminar — Sep. 2022, New Haven, CT
"The Long Range Plan for Nuclear Science: A Perspective on Hot QCD Priorities"

Los Alamos National Laboratory, P-3 Seminar — August 2021, Los Alamos, NM CA (Virtual)
"What can stop the flow? Azimuthal anisotropies at large mass, high p_{T}, and in exotic systems with ATLAS"

Lawrence Berkeley National Laboratory, Heavy Ion Tea — May 2021, Berkeley, CA (Virtual)
"What can stop the flow? Azimuthal anisotropies at large mass, high p_{T}, and in exotic systems with ATLAS"

Brookhaven National Laboratory, Nuclear Physics Seminar — September 2020, Upton, NY
"What can stop the flow? Azimuthal anisotropies at large mass, high p_{T}, and in extremely small systems with ATLAS"

Fermilab, LHC Physics Center Topic of the Week — July 2019, Batavia, IL
"Photon and photon+jet probes of heavy ion collisions"

Lawrence Berkeley National Laboratory, Heavy Ion Tea — June 2019, Berkeley, CA
"Photon and photon+jet probes of heavy ion collisions"

Columbia University, Physics Seminar — March 2016, New York, NY
"New insights into dense and hot nuclear matter at RHIC and the LHC"

Penn State University, High-Energy Physics Seminar — September 2015, State College, PA
"Exploring the hot, deconfined plasma created in ultrarelativistic nuclear collisions"

Brookhaven National Laboratory, Nuclear Physics Seminar — January 2015, Upton, NY
"Calculation of centrality bias factors in p+A collisions"

Brookhaven Physics Department, Nuclear Physics Seminar — December 2013, Upton, NY
"Centrality and rapidity dependence of inclusive jet production in p+Pb collisions"

Invited Workshop and Conference Talks

10th Workshop of the APS Topical Group on Hadronic Physics — Apr 2023, Minneapolis, MN
"Heavy Ions from RHIC to the EIC Era"

QCD Town Hall for the U.S. Long Range Plan for Nuclear Physics — Sep 2022, Boston, MA
"The Future of Experimental Hot QCD"

Jet Physics: From RHIC/LHC to EIC (CFNS Workshop) — June 2022, Stony Brook, NY
"Jet Physics in sPHENIX: Learning from the LHC and Preparing for the EIC"

Zimanyi School Winter Workshop on Heavy Ion Physics December 2020, Virtual
"Jet Probes of the Quark-Gluon Plasma at the LHC"

Jets for 3-D Imaging at the EIC workshop November 2020, Virtual
"sPHENIX Jet Capabilities and the Path to EIC"

Snowmass 2021, Energy Frontier (EF07), Jets in HIC Meeting November 2020, Virtual
"Jets at RHIC"

Jet Observables at the Electron-Ion Collider, RBRC Workshop July 2020, Upton, NY
"Jet Measurements in sPHENIX and the path towards an EIC detector built around the sPHENIX solenoid"

International Symposium on Multi-Particle Dynamics September 2019, Santa Fe, NM
"Connection between soft and hard probes of small collision systems at RHIC and LHC"

European Physical Society Conference on High Energy Physics July 2019, Ghent, Belgium
"High-Density QCD Matter" (Plenary)

RHIC/AGS Annual Users Meeting Workshop on Jets June 2019, BNL
"sPHENIX and its Capabilities on Jet Substructure at RHIC Energies"

8th Workshop of the APS Topical Group on Hadronic Physics April 2019, Denver, CO
"Progress in hard probes of small collision systems"

American Physical Society April Meeting April 2019, Denver, CO
"Developments in hard probes of heavy ion collisions"

Electron Ion Collider User Group Meeting August 2018, Washington, D.C.
"Overview of results from p+A collisions"

Definition of Jets in a Large Background June 2018, Upton, NY
"Heavy ion jet reconstruction in sPHENIX and lessons from the LHC"

13th International Workshop on High-pT Physics in the RHIC/LHC Era
"Hard processes in small systems" October 2017, Bergen, Norway

Precision Spectroscopy of QGP Properties with Jets and Heavy Quarks (INT Program 17-1b)
"pA (and AA and UPC) data at the LHC" May 2017, Seattle, WA

The XXVI International Conference on Ultrarelativistic Heavy-Ion Collisions (Quark Matter)
"Hard processes in small systems" (Plenary) February 2017, Chicago, IL

7th Workshop of the APS Topical Group on Hadronic Physics
"Jets in Heavy Ion Collisions" February 2017, Washington, D.C.

Fall Meeting of the APS Division of Nuclear Physics October 2016, Vancouver, Canada
"Overview and interpretations of centrality-dependent high-p_{T} jet production measurements at RHIC and the LHC"

Recent RHIC and LHC results and their implications for heavy ion physics in the 2020's
"Recent and future jet and photon measurements" October 2016, Boston, MA

Proton and Photon-induced nuclear collisions at the LHC July 2016, Geneva, Switzerland
"Soft-hard correlations in jet production"

Fall Meeting of the APS Division of Nuclear Physics October 2015, Santa Fe, NM

"Prospects for jet measurements with sPHENIX and LHC Run 2"

New Progress in Heavy Ion Collisions October 2015, Wuhan, China
"Progress in Jet Tomography"

7th Int'l Conf. on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions
"Hard probes of small systems" (Plenary) July 2015, Montreal, Canada

Large-Acceptance Jet and Upsilon Detector at RHIC Workshop June 2015, Upton, NY
"The sPHENIX science case and reference design"

3rd Workshop on Jet Modification in the RHIC and LHC Era August 2014, Detroit, MI
"Jet and high-p_{T} probes of p+A collisions"

52nd Ettore Majorana International School of Subnuclear Physics June 2014, Erice, Italy
"High-p_{T} probes of the partonic structure of heavy nuclei"

RHIC/AGS Annual Users Meeting Workshop on p+A physics June 2014, Upton, NY
"High-p_{T} phenomena in p/d+A collisions"

LHC Physics Centre at CERN Workshop February 2014, Geneva, Switzerland
"Centrality dependent p+Pb measurements in ATLAS"

Talks on Behalf of Experimental Collaborations

5th International Conference on the Initial Stages of High-Energy Nuclear Collisions
"Overview of ATLAS Experiment Results" (Plenary) June 2023, Copenhagen, Denmark

9th International Conference on Quarks and Nuclear Physics Sep 2022 (Virtual)
"sPHENIX Experiment Overview"

XXIX Int'l Conf. on Ultra-Relativistic Nucleus-Nucleus Collisions Apr 2022, Krakow, Poland
"Two-particle azimuthal correlations in photo-nuclear Pb+Pb collisions with ATLAS"

Strangeness in Quark Matter May 2021, BNL (Virtual)
"Overview of ATLAS Results" (Plenary)

Opportunities of OO and pO Collisions at the LHC Feb 2021, CERN (Virtual)
"Opportunities with sPHENIX at RHIC"

XXVIII Int'l. Conf. on Ultra-Relativistic Nucleus-Nucleus Collisions Nov 2019, Wuhan, China
"Measurements of electroweak boson tagged jet energy loss and modification by ATLAS"

5th Int'l. Conf. on Initial Stages in High-Energy Nuclear Collisions June 2019, New York, NY
"Photon and jet probes of small systems in ATLAS"

UCLA Santa Fe Jets and Heavy Flavor Workshop January 2019, Los Angeles, CA
"Photon and photon+jet probes of small and large collision systems with ATLAS"

Int'l. Conf. Hard & EM Probes High-Energy Nucl. Coll. Oct 2018, Aix-Les-Bans, France
"Energy loss and modification of photon-tagged jets with ATLAS"

XXVII Int'l. Conf. on Ultra-Relativistic Nucleus-Nucleus Collisions May 2018, Venice, Italy
"Photon-tagged measurements of jet quenching with ATLAS"

7th Int'l. Conf. on High Energy Physics in the LHC Era January 2018, Valparaiso, Chile
"Charmonium production in HI collisions with ATLAS"
and "sPHENIX: Design, Status, Schedule"

5th Heavy Ion Jet Workshop August 2017, CERN
"Overview of jet measurements by ATLAS and perspectives"

European Physical Society Conference on High Energy Physics July 2017, Venice, Italy
"Electroweak bosons in heavy-ion collisions measured with the ATLAS detector"

Santa Fe Jets and Heavy Flavor Workshop February 2017, Santa Fe, NM
"Measurements of jet production in *pp* and Pb+Pb collisions with the ATLAS detector"

33rd Winter Workshop on Nuclear Dynamics January 2017, Snowbird, UT
"Status of jet quenching measurements with the ATLAS detector at the LHC"

5th International Conference on New Frontiers in Physics July 2016, Kolymbari, Greece
"The physics program of sPHENIX: a new jet and upsilon detector at RHIC"

3rd Int'l. Conf. on Initial Stages in High-Energy Nuclear Collisions May 2016, Lisbon, Portugal
"Reconstructed jet probes of small and large systems with the PHENIX detector"

6th Int'l. Workshop on High Energy Physics in the LHC Era January 2016, Valparaiso, Chile
"Recent ATLAS results on jet suppression and modification in Pb+Pb collisions"
and "Progress in reconstructed jet measurements with the PHENIX detector at RHIC"

XXV Int'l. Conf. on Ultra-Relativistic Nucleus-Nucleus Collisions Sept. 2015, Kobe, Japan
"New results on fully corrected dijet asymmetry in Pb+Pb collisions with ATLAS"

European Physical Society Conference on High Energy Physics July 2015, Vienna, Austria
"Jet results in heavy ion collisions with the ATLAS experiment at the LHC"

7th Int'l. Conf. on the Physics and Astrophysics of the QGP Feb. 2015, Kolkata, India
"Jet quenching measurements in lead-lead collisions at 2.76 TeV with the ATLAS detector"

31st Winter Workshop on Nuclear Physics January 2015, Keystone, CO
"Jet physics opportunities and *b*-jet tagging within sPHENIX"

14th Zimanyi Winter School on Heavy Ion Physics December 2014, Budapest, Hungary
"Jet probes of the nuclear and proton wavefunctions in proton–lead collisions with ATLAS"

Hot Quarks '14 September 2014, Las Negras, Spain
"High-p_{T} probes of proton-lead collisions with the ATLAS detector"

XXIV Int'l. Conf. on Ultra-Relativistic Nucleus-Nucleus Coll. May 2014, Darmstadt, Germany
"Centrality and rapidity dependence of inclusive jet production in p+Pb collisions w/ ATLAS"

Int'l. Conf. Hard & EM Probes High-Energy Nucl. Coll. Nov. 2013, Stellenbosch, South Africa
"Inclusive jet production in p+Pb collisions at 5.02 TeV with the ATLAS detector at the LHC"

International Workshop on Low-X Physics May 2013, Rehovot, Israel
"Centrality and jet performance in p+Pb collisions at 5.02 TeV with the ATLAS detector"

8th International Workshop on High p_{T} Physics at the LHC October 2012, Wuhan, China
"Jet Suppression in PHENIX"

XXIII Int'l. Conf. on Ultra-Relativistic Nucleus-Nucleus Coll. Aug. 2012, Washington, D.C.
"Measurement of muon tagged open heavy flavor production in Pb+Pb collisions with ATLAS"

5th Int'l. Conf. on Hard & EM Probes of High Energy Nuclear Coll. May 2012, Cagliari, Italy
"Reconstructed Jet Results in p+p, d+Au and Cu+Cu collisions at 200 GeV from PHENIX"