

CHRISTINE A. AIDALA
Curriculum vitae as of January 13, 2017

Physics Department
University of Michigan
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High-energy experimental nuclear physics; nucleon structure; parton dynamics in QCD.

EDUCATION:

Columbia University Ph.D. program, Physics, 2002-05. M.A. 2004. M.Phil. 2005. Ph.D. 2005.
University of Chicago Ph.D. program, Physics, 1999-2000. Medical leave starting March 2000.
Yale University 1995-99. B.S. in Physics, B.S. in Music 1999.

RESEARCH POSITIONS HELD:

September 2016-present. **Associate Professor of Physics, University of Michigan.**

September 2012-August 2016. **Assistant Professor of Physics, University of Michigan.**

January-July 2012. **Scientist 2, Los Alamos National Laboratory.** PHENIX Experiment at the Relativistic Heavy Ion Collider (RHIC), Brookhaven National Laboratory, and E906/SeaQuest, Fermi National Accelerator Laboratory.

January 2009-December 2011. **Frederick Reines Distinguished Postdoctoral Fellow, Los Alamos National Laboratory,** PHENIX and E906/SeaQuest.

January 2006-December 2008. **Postdoctoral Research Associate, UMass Amherst,** PHENIX.

September 2002-December 2005. **Graduate Research Assistant, Columbia University,** PHENIX. Thesis advisor: B.A. Cole.

September 2001-August 2002. **Physics Associate, Brookhaven National Laboratory,** PHENIX.

June 1999-January 2000. **Graduate researcher, U. of Chicago,** OPAL Experiment at CERN. J. Pilcher.

1998-99. **Senior thesis, Yale U.,** polarized proton studies for the HERA e+p collider. V.W. Hughes.

Summer 1998. **CERN Summer Student Program,** data acquisition in a silicon lab. P. Weilhammer.

Summer 1997. **BNL Summer Student Program,** STAR Experiment at RHIC. T.J. Hallman.

Summer 1996. **Wright Nuclear Structure Laboratory, Yale U.**, low-energy nuclear structure. R.F. Casten.

RESEARCH FUNDING:

External funding:

National Science Foundation. *CAREER: Valence and Sea Quark Dynamics at Fermilab*, July 1, 2015-June 30, 2020. Sole PI.

Department of Energy Office of Nuclear Physics. *Partonic transverse momentum effects in PHENIX and beyond*, April 15, 2015-April 14, 2018. Sole PI.

2015 Sloan Research Fellowship. Sole PI.

Internal U. of Michigan funding:

MCubed Program. *From physical principles to Hamiltonian and Lagrangian dynamics*. In collaboration with David J. Baker (Philosophy), Lydia Bieri (Mathematics), Gabriele Carcassi (Physics).

2015 Michigan Memorial Phoenix Project. *Development of a prototype liquefied noble gas detector to measure 200 keV to 10 MeV neutrons*. Sole PI.

2014 Elizabeth Caroline Crosby Faculty Grant. Sole PI.

2013 Transforming Learning for Third Century QuickWins. *Student experiments in biomedical physics: A journey to inner space*. Co-PI with Fred Becchetti, Thomas Schwarz, and Ramon Torres-Isea.

TEACHING AND MENTORSHIP EXPERIENCE:

Teaching at U. of Michigan:

Physics 401: **Intermediate Mechanics**, Fall 2016. Physics 288/489: **The Physics of Music**, Winter 2015, Winter 2016, Winter 2017.

Physics 405: **Intermediate Electricity and Magnetism**, Fall 2014, Fall 2015.

Physics 351: **Mathematical Methods of Theoretical Physics I**, Fall 2012, Winter 2013, Fall 2013.

U. of Kansas, Guest Lecturer for Graduate Nuclear Physics, March 2015.

Teaching development activities:

University Musical Society Mellon Faculty Institute on Arts Academic Integration, 2015–2017

American Association of Physics Teachers New Faculty Workshop, June 2015

U. of Michigan LSA Teaching Academy, August 2012

Student advising and thesis committee membership:

- Thesis advisor, B.J. Ramson, U. of Michigan, May 2013-present
- Thesis advisor, J.D. Osborn, U. of Michigan, May 2014-present
- Thesis advisor, C. Ayuso, U. of Michigan, January 2015-present
- Thesis co-advisor, M. Febbraro, U. of Michigan, May 2013-August 2014

- Undergraduate research advisor for Y. Jia, R. Araj, N.W. Kamp, E.C. Camras, E. Lesser, R.T. Read, I. Mooney, M. Barber, R. Cernak, M. Wood, E. Cizmas, A.S. White, C.M. Culkin, U. of Michigan
- Research advisor for high school students S. Akunuri, S. Deshmukh, 2014-2015
- Faculty advisor for U. of Michigan undergraduate W. Qian as an associate editor for the Journal of Young Investigators, 2012-2014
- Thesis committee, M. Bales (Physics), A. Trahan (Nuclear Engineering), U. of Michigan
- Thesis committee, T. Engelmores, Columbia U.
- Prospectus committee, C. Hendrus, D. Morton, A. Tewsley-Booth, S. Su, Z. Qu (Physics), M. Paff, M. Monterial (Nuclear Engineering), U. of Michigan
- Prospectus committee, J. Pan, G. Kaur, Wayne State U.
- Sponsor for R.J. Belmont, Vanderbilt U., as a Visiting Scholar at U. of Michigan to complete thesis, 2012
- Supervision of A. Datta, UMass Amherst, throughout thesis analyses, Sep 2007-Feb 2012
- Supervision of R. Han, Peking U., in completion of thesis analysis, May-Dec 2007

AWARDS AND RECOGNITION:

Kavli Fellow, 2016.

Sloan Research Fellowship, 2015.

National Science Foundation CAREER Award, 2015.

Willie Hobbs Moore: Aspire, Advance, Achieve Award, for outstanding service as a mentor to the U-M Society of Women in Physics, University of Michigan, 2014.

Nominee, Alexander M. Cruickshank Award, Board of Trustees, Gordon Research Conferences, 2014.

Essayist for *Blazing the Trail: Essays by Leading Women in Science*. E. Ideal and R. Meharchand, eds. CreateSpace Independent Publishing, 2013.

Distinguished Women Physicists Lecture Series colloquium speaker, U. of Connecticut, 2012.

Invited Fellow, 50th anniversary celebration of the International School on Subnuclear Physics, Erice, Italy, June–July 2011. Organized by G. 't Hooft and A. Zichichi.

Sambamurti Memorial Lectureship, BNL, 2008. *"For her contributions to the RHIC Spin Program, notably her leadership in the measurement of the transverse spin structure of the proton using pions."*

Vernon Hughes Travel Fellowship, 2004.

Luise Meyer-Schutzmeister Award, Association for Women in Science, 2004.

GAANN Fellowship, U.S. Department of Education, through University of Chicago, 1999.

Scholarship Recipient, Long Island Chapter of the **American Nuclear Society**, 1999.

Nominee for **Barry M. Goldwater Scholarship**, Yale University, 1998.

CONFERENCE, WORKSHOP, AND SCHOOL ORGANIZATION:

Scientific Advisory Committee, Electron-Ion Collider Users Meeting, Trieste, Italy, July 18-22, 2017.

International Advisory Committee, Quark Matter, Chicago, IL, February 5-11, 2017.

Local Program Committee, 22nd International Symposium on Spin Physics, Urbana-Champaign, IL, September 25-30, 2016.

Scientific Committee, Electron-Ion Collider Users Meeting, Berkeley, CA, January 6-9, 2016.

Local Organizing Committee, American Physical Society Division of Particles and Fields Meeting, Ann Arbor, MI, August 3-7, 2015.

Organizing Committee, 2015 Workshop of the American Physical Society Topical Group on Hadronic Physics, Baltimore, MD, April 8-10, 2015.

Local Organizing Committee, APS Conference for Undergraduate Women in Physics, Ann Arbor, MI, January 16-18, 2015.

Chair, Workshop on Opportunities for Polarized Physics at Fermilab, May 20-22, 2013.

International Organizing Committee, 3rd Workshop on the QCD Structure of the Nucleon (QCD-N12), Bilbao, Spain, October 22-26, 2012.

Program Committee, 19th Particles and Nuclei International Conference (PANIC 2011) and Co-organizer for session on Quarks and Gluons in Hadrons, MIT, July 24-29, 2011.

Co-organizer, Workshop on Transverse-Momentum-Dependent Distributions, ECT*, Trento, Italy, June 21-25, 2010.

Principal organizer, Symposium on Educational and Public Outreach, sponsored by the RHIC-AGS Users Executive Comm. and the National User Facility Organization, BNL, June 9, 2010.

Co-convenor, Spin Physics Working Group, 18th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2010), Florence, Italy, April 17-23, 2010.

Co-organizer, Workshop on Transverse Spin Physics, RHIC-AGS Users Mtg, BNL, June 2009.

Principal organizer, 4th PHENIX Spinfest School on QCD Physics, BNL, August 2008.

Co-organizer, 2nd PHENIX Spinfest School on QCD Physics, BNL, August 2006.

Principal organizer, Workshop on the Helicity Structure of the Nucleon, RHIC-AGS Users Meeting, BNL, June 2006.

Co-organizer, Workshop on Proton Spin Physics, RHIC-AGS Users Meeting, BNL, June 2005.

OTHER SERVICE AND EXPERIENCE:

Committee on a U.S.-Based Electron-Ion Collider Science Assessment, National Academy of Sciences, 2016-17.

Program Committee, American Physical Society Division of Nuclear Physics, 2017-18.

Elected Institutional Board Chair, Electron-Ion Collider Users Group, October 2016–present.

Co-convenor, sPHENIX Cold QCD Topic Group, August 2016–present.

U. of Michigan representative, sPHENIX Institutional Board, August 2015–present.

U. of Michigan representative, PHENIX Institutional Board, November 2012–present.

U. of Michigan Physics Department HEP/Astro/Nuclear Seminar organizer, 2012–present. Chair 2013-14, 2015-16, 2016-17.

U. of Michigan Physics Department Graduate Admissions Committee, 2016-17.

U. of Michigan Physics Department Diversity, Equity, and Inclusion Committee, 2016-17.

U. of Michigan Physics Department Rackham Graduate School Diversity Ally, 2016-17.

Panelist, Panel discussion: Undergraduate research, APS Conference for Undergraduate Women in Physics, Wayne State University, Jan 2017.

Nominating Committee, American Physical Society Topical Group on Hadronic Physics, 2016.

Lecturer, 31st Hampton University Graduate Studies (HUGS) Program at Jefferson Lab, Transverse-Momentum-Dependent Parton Distributions and Color Entanglement. Jefferson Lab, June 2016. Six hours of lectures aimed at graduate students in hadronic physics.

Member, Electron-Ion Collider Users Group Charter Writing Committee, 2016.

Member, **Relativistic Heavy Ion Collider Cold QCD Plan Writing Committee**, 2015-16.

Member, **sPHENIX Collaboration Bylaws Committee**, 2015.

Member, **PHENIX Collaboration Spokesperson Nominating Committee**, 2015.

Member, **U. of Michigan Willie Hobbs Moore Award Selection Committee**, 2015.

Member, **U. of Michigan Physics Department Undergrad Curriculum and Concerns Committee**, Sept 2012-May 2015.

Faculty advisor, **U. of Michigan Society of Women in Physics (SWIP)**, Sept 2012-Aug 2016.

Elected Member-At-Large, Executive Committee of the American Physical Society Topical Group on Hadronic Physics, 2014-15.

Elected member, PHENIX Executive Council, 2011-2016 (second term ends February 2017). The EC is responsible for establishing scientific priorities for the experiment, with members selected for their "scientific judgment, technical expertise, and commitment to the experiment."

U. of Michigan representative, sPHENIX Institutional Board, August 2015-present.

U. of Michigan representative, PHENIX Institutional Board, November 2012-present.

U. of Michigan Physics Department HEP/Astro/Nuclear Seminar organizer, 2012-2016. **Chair** 2013-14, 2015-16.

Moderator, Panel discussion: Women In Physics Career Panel, APS Conference for Undergraduate Women in Physics, Ann Arbor, MI, Jan 2015.

Member, **APS Topical Group on Hadronic Physics Dissertation Award Committee**, 2014.

Member, **Relativistic Heavy Ion Collider Thesis Award Committee**, 2014, 2011.

Elected member, National User Facility Organization (NUFO) Steering Committee, June 2011-June 2014. <http://www.nufo.org>

Nuclear Physics Day on Capitol Hill, May 2013. Met with staff members for Michigan Senators Levin and Stabenow and Representative Dingell to discuss funding for nuclear physics research.

Member, **BNL Work-Life Balance Committee**, April 2010-June 2012.

Elected member, RHIC-AGS Users Executive Committee, June 2009-June 2012.

Moderator, Panel discussion: The Future of RHIC Upgrades, RHIC Users Open Forum Meeting, Meeting of the APS Division of Nuclear Physics, October 2011.

Member, **PHENIX Decadal Plan Writing Committee**, March-September 2010.

Member, PHENIX Speakers Bureau, April 2009-February 2010.

Lecturer, European Graduate School on Complex Systems of Hadrons and Nuclei (HANUC), The Structure of the Nucleon. Turin, Italy, March 2009.

Member, PHENIX Forward Calorimeter Upgrade Internal Review Comm., Jan-Feb 2009.

Co-convenor, PHENIX Spin Physics Working Group, January 2007-April 2009. Oversaw and coordinated all analysis activities within Working Group; approved scientific results for public release by the collaboration.

Member, PHENIX Spokesperson Selection Task Force, May-July 2006.

Elected Student/Postdoc Representative, RHIC-AGS Users Executive Comm., 2004-05.

INVITED CONFERENCE AND WORKSHOP PRESENTATIONS:

Seminars and colloquia listed separately below.

For a complete listing of all presentations, please see <http://www-personal.umich.edu/~caidala/index.html>.

Kavli Frontiers of Science Symposium, National Academy of Sciences, Irvine, CA, Oct 2016. *Peering Into the Proton: Proton Substructure and Internal Dynamics* (poster).

Gordon Conference on Photonuclear Reactions, Holderness, NH, Aug 2016. *SeaQuest: Probing Protons and Nuclei with Dileptons*.

APS Conference for Undergraduate Women in Physics, Newport News, VA, Jan 2016. *Probing the Proton: Entangled Personal and Particle Paths*.

ECT* Workshop: From 1-D Fragmentation to 3-D Correlated Fragmentation, Trento, Italy, October 2015. *The Future of Hadronization: Thoughts from an Experimentalist*.

APS Division of Particles and Fields Meeting, Ann Arbor, MI, August 2015. *Advancing the Era of Quantitative QCD: Experiment*. (Plenary)

Conference on the Intersections of Particle and Nuclear Physics, Vail, CO, May 2015. *The Relativistic Heavy Ion Collider and Large Hadron Collider: Pushing Forward the Era of Quantitative QCD*. (Plenary)

International Workshop on Structure and Spectroscopy, Suzdal, Russia, May 2015. *Recent Results and Future Plans for Studying Proton Structure at Fermilab*.

APS Conference for Undergraduate Women in Physics, Ann Arbor, MI, Jan 2015. *Probing the Proton: Entangled Personal and Particle Paths*.

4th International Workshop on Nucleon Structure at Large Bjorken-x, Frascati, Italy, November 2014. *Nucleon Structure Physics at the Relativistic Heavy Ion Collider*.

APS Division of Nuclear Physics Fall Meeting, Waikoloa, HI, October 2014. *Accelerator Studies for Polarized Protons at the Fermilab Main Injector.*

Gordon Conference on Photonuclear Reactions, Holderness, NH, August 2014. *Parton Correlations In and Across Nucleons.*

4th International Workshop on Transverse Polarization Phenomena in Hard Processes (Transversity 2014), Chia, Italy, June 2014. *Transversity 2014 Closing Remarks: Moving Forward in the Era of Quantitative QCD.* (Workshop closing talk)

APS Division of Nuclear Physics Fall Meeting, RHIC Users Forum, Newport News, VA, October 2013. *Advancing QCD at RHIC by Studying the Partonic Bound States of Everyday Matter.*

APS Division of Nuclear Physics Fall Meeting, Newport Beach, CA, October 2012. *Entering the Electronic Age at RHIC: eRHIC.*

APS Division of Nuclear Physics Fall Meeting, East Lansing, MI, October 2011. *The Electron-Ion Collider: Tackling QCD from the Inside (of Nucleons and Nuclei) Out.*

Quarks, Hadrons, and LHC, Mumbai, India, August 2011. *Transverse-Momentum-Dependent Distributions and Transverse Spin Phenomena at RHIC.*

Gluons and the Quark Sea at High Energies: Workshop to develop the physics case of a high-energy Electron-Ion Collider, INT, U. of Washington, September-November 2010. *Probing QCD in Hadrons Through Transverse-Momentum-Dependent Distributions at RHIC—Or—Why Use Messy $p+p$ Collisions to Study What’s Happening Inside the Nucleon?*

Electromagnetic Interactions with Nucleons and Nuclei (EINN 2009) Workshop on Partonic Transverse Momentum Distributions, Milos, Greece, September-October 2009. *Single-Spin Asymmetries and Transverse-Momentum-Dependent Distributions at RHIC.*

18th International Symposium on Spin Physics (SPIN2008), Charlottesville, VA, October 2008. *Spin in Hadron Reactions.* (Plenary)

Gordon Conference on Photonuclear Reactions, Tilton, NH, August 2008. *Transverse Spin Physics at RHIC.*

2nd International Workshop on Transverse Polarization Phenomena in Hard Processes (Transversity 2008), Ferrara, Italy, May 2008. *Transversity and Transverse-Momentum-Dependent Distribution Measurements from PHENIX and BRAHMS.*

24th Winter Workshop on Nuclear Dynamics, South Padre Island, TX, April 2008. *Peering into Hadronic Matter: The Electron-Ion Collider.*

International Workshop on Structure and Spectroscopy, Freiburg, Germany, March 2007. *Recent Spin Physics Results from RHIC.*

Spin Structure of the Nucleon Workshop, Nashville, TN, October 2006. *Recent Spin Physics Results from PHENIX*.

International Workshop on Transversity: New Developments in Nucleon Spin Structure, ECT*, Trento, Italy, June 2004. *Single Transverse Spin Asymmetries at RHIC*.

SEMINARS, COLLOQUIA, AND PUBLIC LECTURES:

Public lecture: U. of Michigan Saturday Morning Physics series, Feb 2017. *The Antiups and Antidowns of Life: Studying Antiquarks in Hydrogen and Carbon*.

Nuclear and Particle Physics Colloquium: MIT, Nov 2016. *Spin-Momentum Correlations, Aharonov-Bohm, and Color Entanglement in Quantum Chromodynamics*.

Seminar: UCLA, Oct 2016. *Spin-Momentum Correlations, Aharonov-Bohm, and Color Entanglement in Quantum Chromodynamics*.

Colloquium: U. of Michigan, Oct 2015. *Frontiers in Quantum Chromodynamics*.

Colloquia: U. of Kansas, William & Mary, Mar, Jan 2015. *Spin-Momentum Correlations, Aharonov-Bohm, and Color Entanglement in Quantum Chromodynamics*.

Seminar: Jefferson Lab, Jan 2015. *Spin-Momentum Correlations, Aharonov-Bohm, and Color Entanglement in Quantum Chromodynamics*.

Seminar: Penn State U., Jan 2015. *Measuring Polarization Effects in Proton-Proton and Muon-Nucleon Scattering*.

Seminar: Southern Methodist U., Dec 2014. *Investigating Proton Structure at the Relativistic Heavy Ion Collider*.

Seminar: Ohio U., Jan 2014. *Investigating Proton Structure at the Relativistic Heavy Ion Collider*.

Colloquium: U. of Notre Dame, Jan 2014. *From Quarks and Gluons to the World Around Us: Advancing Quantum Chromodynamics by Probing Nucleon Structure*.

Public lecture: U. of Michigan Saturday Morning Physics series, Mar 2013. *Peering Into the Proton*. https://www.youtube.com/watch?v=iLNches_G6M

Seminar: University of D0, Fermilab, Mar 2013. *Investigating Proton Structure at the Relativistic Heavy Ion Collider*.

Seminar: Wayne State U., Jan 2013. *Investigating Proton Structure at the Relativistic Heavy Ion Collider*.

Colloquium: Triangle Nuclear Theory series, Duke U., Feb 2012. *The Electron-Ion Collider: Tackling QCD from the Inside (of Nucleons and Nuclei) Out*.

Colloquium: UConn, Jan 2012. *From Quarks and Gluons to the World Around Us: Understanding Quantum Chromodynamics by Exploring Nucleon Structure.*

Seminars: Los Alamos National Lab, Rutgers U., Sep - Oct 2011. *The PHENIX Decadal Plan: Crafting the Future of the Relativistic Heavy Ion Collider.*

Seminar: Stony Brook U., Feb 2011. *From Quarks and Gluons to the World Around Us: Advancing into the Era of Quantitative QCD via Investigation of Nucleon Structure.*

Seminars: DESY-Hamburg, DESY-Zeuthen, Germany, Oct 2010. *Investigating the Spin Structure of the Proton at the Relativistic Heavy Ion Collider.*

Seminar: Istituto Nazionale di Fisica Nucleare, Ferrara, Italy, Jun 2010. *Investigating the Spin Structure of the Proton at RHIC: Recent Results.*

Colloquium, Catholic U. of America, Dec 2009. *Getting Protons to Study Themselves: Investigating Proton Structure at the Relativistic Heavy Ion Collider.*

Seminar: Los Alamos National Lab, Oct 2009. *The Electron-Ion Collider: Tackling QCD from the Inside (of Nucleons and Nuclei) Out.*

Seminar: Jefferson Lab, May 2009. *Investigating the Spin Structure of the Proton at RHIC.*

Seminars: Los Alamos National Lab, Columbia U., Jan - Feb 2009. *Frontiers in Nucleon Structure.*

Seminars: Michigan State U., U. of Kentucky, Kent State U., 2008. *The Emerging QCD Frontier: The Electron-Ion Collider.*

Seminar: INFN Torino, Italy, Jun 2008. *Recent Spin Physics Results from RHIC.*

Seminar: INFN Pavia, Italy, Jun 2008. *Recent Results from the PHENIX Experiment at RHIC.*

Colloquium: Old Dominion U., Sep 2007. *A Novel Shakedown of the Proton Spin Breakdown: How the Field Has Become Wider with a Polarized Proton Collider.*

Seminars: UMass Amherst, INFN Cagliari, Italy, 2006. *Recent Spin Physics Results from PHENIX.*

Seminar: Mt. Holyoke College, 2006. *The Whole Story Behind a Half: The Quest to Understand the Protons Spin.*

Seminars: Indiana University Cyclotron Facility, Los Alamos National Lab, Lawrence Berkeley National Lab, 2005. *Studying the Transverse Spin Structure of the Proton at PHENIX.*

Seminars: CERN, Switzerland; Laboratori Nazionali di Frascati, Italy; INFN Torino, Italy; INFN Ferrara, Italy, 2004. *Recent Spin Results from PHENIX.*

Outreach seminars promoting physics graduate study: **Bryn Mawr, Mt. Holyoke, Smith, Vassar, Barnard, Wellesley, and Amherst Colleges**, 2003-04. Sponsored by Columbia University.

Colloquium: Vassar College, Dec 2003. *Flying High with PHENIX: Surveying the Landscape for Quark-Gluon Plasma and the Secrets of the Protons Spin.*

CHRISTINE A. AIDALA
PUBLICATION LIST AS OF JANUARY 13, 2017
PAPERS SUBMITTED FOR PUBLICATION:

PHENIX Collaboration papers (significant contribution made to those in *bold italic*):

1. Measurements of $B \rightarrow J/\psi$ at forward rapidity in $p + p$ collisions at $\sqrt{s} = 510$ GeV. C. Aidala et al. arXiv:1701.01342
2. Angular decay coefficients of J/ψ mesons at forward rapidity from $p + p$ collisions at $\sqrt{s} = 510$ GeV. A. Adare et al. arXiv:1612.06807
3. Measurement of the relative yields of $\psi(2S)$ to $\psi(1S)$ mesons produced at forward and backward rapidity in $p + p$, $p + \text{Al}$, $p + \text{Au}$, and ${}^3\text{He} + \text{Au}$ collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. arXiv:1609.06550
4. *Nonperturbative-transverse-momentum effects and evolution in dihadron and direct photon-hadron angular correlations in $p + p$ collisions at $\sqrt{s} = 510$ GeV.* A. Adare et al. arXiv:1609.04769
5. Measurement of long-range angular correlations and azimuthal anisotropies in high-multiplicity $p + \text{Au}$ collisions at $\sqrt{s_{NN}} = 200$ GeV. C. Aidala et al. arXiv:1609.02894
6. Beam energy and system-size dependence of the space-time extent of the pion emission source produced in heavy ion collisions. A. Adare et al. arXiv:1410.2559

PUBLICATIONS IN PEER-REVIEWED JOURNALS:

1. **Limits on transverse-momentum-dependent evolution from semi-inclusive deep-inelastic scattering at moderate Q .** C.A. Aidala, B. Field, L.P. Gamberg, and T.C. Rogers. Phys. Rev. D89:094002, 2014.
2. **The PHENIX Forward Silicon Vertex Detector.** C. Aidala et al. Nucl. Instrum. Meth. A755:44, 2014.
3. **The spin structure of the nucleon.** C.A. Aidala, S.D. Bass, D. Hasch, and G.K. Mallot. Rev. Mod. Phys. 85:655, 2013. (Invited submission)
4. **Global analysis of fragmentation functions for eta mesons.** C.A. Aidala, F. Ellinghaus, R. Sassot, J.P. Seele, and M. Stratmann. Phys. Rev. D83:034002, 2011.
5. **Towards an understanding of nucleon spin structure: from hard to soft scales.** S.D. Bass and C.A. Aidala. Int. J. Mod. Phys. A21:4407-4424, 2006.
6. **A hadron-blind detector for PHENIX.** C. Aidala et al. Nucl. Instrum. Meth. A502:200-204, 2003.

PHENIX Collaboration papers (significant contribution made to those in *bold italic*):

1. Measurements of double-helicity asymmetries in inclusive J/ψ production in longitudinally polarized $p + p$ collisions at $\sqrt{s} = 510$ GeV. A. Adare et al. Phys. Rev. D94:112008, 2016.
2. Centrality-dependent modification of jet-production rates in deuteron-gold collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 116:122301, 2016.
3. Azimuthally anisotropic emission of low-momentum direct photons in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C94:064901, 2016.
4. Measurements of directed, elliptic, and triangular flow in Cu+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C94:054910, 2016.
5. Measurement of parity-violating spin asymmetries in W^\pm production at midrapidity in longitudinally polarized $p + p$ collisions. A. Adare et al. Phys. Rev. D93:051103, 2016.
6. Measurements of identified particle higher harmonic flow in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C93:051902, 2016.
7. Single electron yields from semileptonic charm and bottom hadron decays in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C93:034904, 2016.
8. Forward J/ψ production in U+U collisions at $\sqrt{s_{NN}} = 193$ GeV. A. Adare et al. Accepted by Phys. Rev. C93:034903, 2016.
9. ϕ meson production in the forward/backward rapidity region in Cu+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C93:024904, 2016.
10. Transverse energy production and charged-particle multiplicity at midrapidity in various systems from $\sqrt{s_{NN}} = 7.7$ to 200 GeV. A. Adare et al. Phys. Rev. C93:024901, 2016.
11. ***Dielectron production in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV.*** A. Adare et al. Phys. Rev. C93:014904, 2016.
12. Measurement of higher cumulants of net-charge multiplicity distributions in Au+Au collisions at $\sqrt{s_{NN}} = 7.7 - 200$ GeV. A. Adare et al. Phys. Rev. C93:011901, 2016.
13. Inclusive cross section and double-helicity asymmetry for π^0 production at midrapidity in $p + p$ collisions at $\sqrt{s} = 510$ GeV. A. Adare et al. Phys. Rev. D93:011501, 2016.
14. Measurements of elliptic and triangular flow in high-multiplicity $^3\text{He}+\text{Au}$ collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 115:142301, 2015.
15. ϕ meson production in $d+\text{Au}$ collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C92:044909, 2015.
16. Systematic study of charged-pion and kaon femtoscopy in Au+Au collisions at $\sqrt{s_{NN}}=200$ GeV. A. Adare et al. Phys. Rev. C92:034914, 2015.
17. Systematic study of v_2 in Cu+Cu and Au+Au collisions at $\sqrt{s_{NN}} = 62.4 - 200$ GeV. A. Adare et al. Phys. Rev. C92:034913, 2015.
18. Centrality dependence of thermal photon production in $\sqrt{s_{NN}} = 200$ GeV Au+Au collisions. A. Adare et al. Phys. Rev. C91:064904, 2015.

19. Measurement of long-range angular correlation and quadrupole anisotropy of pions and (anti)protons in central d +Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 114:192301, 2015.
20. Heavy quark production and elliptic flow in Au+Au collisions at $\sqrt{s_{NN}} = 62.4$ GeV. A. Adare et al. Phys. Rev. C91:044907, 2015.
21. Search for dark photons from neutral meson decays in $p + p$ and d +Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C91:031901, 2015.
22. ***Inclusive cross sections, charge ratio and double-helicity asymmetries for π^+ and π^- production in $p+p$ collisions at $\sqrt{s} = 200$ GeV.*** A. Adare et al. Phys. Rev. D91:032001, 2015.
23. Measurement of the $\nu(1S + 2S + 3S)$ cross section in $p + p$ and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C91:024913, 2015.
24. The cross section for $b\bar{b}$ production via dielectrons in d +Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C91:014907, 2015.
25. Nuclear matter effects on J/ψ production in asymmetric Cu+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C90:064908, 2014.
26. ***Cross section and transverse single-spin asymmetry of η mesons in $p^\uparrow + p$ collisions at $\sqrt{s} = 200$ GeV at forward rapidity.*** A. Adare et al. Phys. Rev. D90:072008, 2014.
27. Comparison of the space-time extent of the emission source in d +Au and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Nucl. Phys. A931:1082, 2014.
28. Measurement of K_S^0 and K^{*0} in $p + p$, d +Au, and Cu+Cu collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C90:054905, 2014.
29. Low-mass vector meson production at forward rapidity in $p + p$ collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. D90:012006, 2014.
30. PHENIX centrality categorization in d +Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C90:034902, 2014.
31. System-size dependence of open-heavy-flavor production in nucleus-nucleus collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C90:034903, 2014.
32. Inclusive double-helicity asymmetry in neutral pion and eta meson production in $p+p$ collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. D90:012007, 2014.
33. Measurement of transverse-single-spin asymmetries for midrapidity and forward-rapidity production of hadrons in polarized $p+p$ collisions at $\sqrt{s} = 200$ and 62 GeV. A. Adare et al. Phys. Rev. D90:012006, 2014.
34. Cold nuclear matter effects on heavy quark production at forward and backward rapidities in d +Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 112:252301, 2014.
35. Azimuthal-angle dependence of charged-pion-interferometry measurements with respect to 2nd- and 3rd-order event plane in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett 112:222301, 2014.

36. Transverse-energy distributions at midrapidity in p+p, d+Au, and Au+Au collisions at $\sqrt{s_{NN}}=62.4$ –200 GeV and implications for particle-production models. S.S. Adler et al. Phys. Rev. C89:044905, 2014.
37. Heavy flavor electron-muon correlations in p+p and d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C:034915, 2014.
38. Azimuthal anisotropy of π^0 and eta mesons in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C88:064910, 2013.
39. Quadrupole anisotropy in dihadron azimuthal correlations in central d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 111:212301, 2013.
40. Nuclear modification of ψ' , χ_c and J/ψ production in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 111:202301, 2013.
41. ***Spectra and ratios of identified particles in Au+Au and d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV.*** A. Adare et al. Phys. Rev. C88:024906, 2013.
42. Inclusive cross section and transverse single spin asymmetry for very forward neutron production in polarized p+p collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. D88:032006, 2013.
43. Medium modification of jet fragmentation in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV measured in direct photon-hadron correlations. A. Adare et al. Phys. Rev. Lett. 111:32301, 2013.
44. Direct photon production in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C87:054907, 2013.
45. Upsilon (1S+2S+3S) production in d+Au and p+p collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C87:044909, 2013.
46. Neutral pion production with respect to centrality and reaction plane in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C87:034911, 2013.
47. Transverse-momentum dependence of the J/ψ nuclear modification in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C87:034904, 2013.
48. Double spin asymmetry of electrons from heavy flavor decays in p+p collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. D87:012001, 2012.
49. Direct photon production in p+p collisions at $\sqrt{s} = 200$ GeV at midrapidity. A. Adare et al. Phys. Rev. D86:072008, 2012.
50. Cold-nuclear-matter effects on heavy quark production in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 109:242301, 2012.
51. J/ψ suppression at forward rapidity in Au+Au collisions at $\sqrt{s_{NN}} = 39$ and 62.4 GeV. A. Adare et al. Phys. Rev. C86:064901, 2012.
52. Measurement of direct photons in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S. Afanasiev et al. Phys. Rev. Lett 109:152302, 2012.
53. Evolution of π^0 suppression in Au+Au collisions from $\sqrt{s_{NN}} = 39$ to 200 GeV. A. Adare et al. Phys. Rev. Lett. 109:152301, 2012.

54. Observation of direct-photon collective flow in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 109:122302, 2012.
55. Nuclear modification factor for open-heavy-flavor-production at forward rapidity in Cu+Cu collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C86:024909, 2012.
56. Deviation from quark-number scaling of the anisotropy parameter v_2 of pions, kaons, and protons in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C85:064914, 2012.
57. Ground and excited charmonium state production in p+p collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. D85:092004, 2012.
58. Measurements of higher-order flow harmonics in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 107:252301, 2011.
59. The PHENIX Decadal Plan: Crafting the future of RHIC. C.A. Aidala for the PHENIX Collaboration. J. Phys. Conf. Ser. 316:012017, 2011.
60. ***Cross sections and double-spin asymmetries of midrapidity inclusive charged hadron production in p+p collisions at $\sqrt{s} = 62.4$ GeV.*** A. Adare et al. Phys. Rev. D86:092006, 2012.
61. Measurement of direct photon v_2 in $\sqrt{s_{NN}} = 200$ GeV Au+Au collisions. A. Adare et al. Phys. Rev. Lett. 109:122302, 2012.
62. J/ψ suppression at forward rapidity in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C84:054912, 2011.
63. Suppression of back-to-back hadron pairs at forward rapidity in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 107:172301, 2011.
64. Production of omega mesons in p+p, d+Au, Cu+Cu, and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C84:044902, 2011.
65. Cold nuclear matter effects on J/ψ yields as a function of rapidity and nuclear geometry in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 107:142301, 2011.
66. Heavy quark production in p+p and energy loss and flow of heavy quarks in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C84:044905, 2011.
67. Suppression of away-side jet fragments with respect to the reaction plane in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C84:024904, 2011.
68. ***Cross section and double-helicity asymmetry in charged hadron production in p+p collisions at $\sqrt{s} = 62.4$ GeV at PHENIX.*** C.A. Aidala for the PHENIX Collaboration. J. Phys. Conf. Ser. 295:012093, 2011.
69. Event structure and double helicity asymmetry in jet production from polarized p+p collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. D84:012006, 2011.
70. Identified charged hadron production in p+p collisions at $\sqrt{s} = 200$ and 62.4 GeV. A. Adare et al. Phys. Rev. C83:064903, 2011.
71. Azimuthal correlations of electrons from heavy-flavor decay with hadrons in p+p and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C83:044912, 2011.

72. ***Measurement of neutral mesons in p+p collisions at $\sqrt{s} = 200$ GeV and scaling properties of hadron production.*** A. Adare et al. Phys. Rev. D83:052004, 2011.
73. Nuclear modification factors of phi mesons in d+Au, Cu+Cu and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C83:024909, 2011.
74. Cross section and parity violating spin asymmetries of W^\pm production in polarized p+p collisions at $\sqrt{s} = 500$ GeV. A. Adare et al. Phys. Rev. Lett. 106:062001, 2011.
75. ***Cross section and double helicity asymmetry for eta mesons and their comparison to neutral pion production in proton-proton collisions at $\sqrt{s} = 200$ GeV.*** A. Adare et al. Phys. Rev. D83:032001, 2011.
76. ***Measurement of transverse single-spin asymmetries for J/ψ production in polarized p+p collisions at $\sqrt{s} = 200$ GeV.*** A. Adare et al. Phys. Rev. D82:112008, 2010. Err. Ibid. D86:099904, 2012.
77. Azimuthal anisotropy of neutral pion production in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV: Path-length dependence of jet quenching and the role of initial geometry. A. Adare et al. Phys. Rev. Lett. 105:142301, 2010.
78. High- p_T direct photon and π^0 triggered azimuthal jet correlations and measurement of k_T for isolated direct photons in p+p collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. D82:072001, 2010.
79. Elliptic and hexadecapole flow of charged hadrons in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 105:062301, 2010.
80. ***Transverse momentum dependence of η meson suppression in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV.*** A. Adare et al. Phys. Rev. C82:011902 (R), 2010.
81. Transverse momentum dependence of J/ψ polarization at mid-rapidity in p+p collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. D82:012001, 2010.
82. Trends in yield and azimuthal shape modification in dihadron correlations in relativistic heavy ion collisions. A. Adare et al. Phys. Rev. Lett. 104:252301, 2010.
83. Detailed measurement of the e+e- pair continuum in p+p and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV and implications for direct photon production. A. Adare et al. Phys. Rev. C81:034911, 2010.
84. Enhanced production of direct photons in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 104:132301, 2010.
85. ***Double helicity dependence of jet properties from dihadrons in longitudinally polarized p+p collisions at $\sqrt{s} = 200$ GeV.*** A. Adare et al. Phys. Rev. D81:012002, 2010.
86. High- p_T π^0 production with respect to the reaction plane in Au + Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S. Afanasiev et al. Phys. Rev. C80:054907, 2009.
87. Charged kaon interferometric probes of space-time evolution in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S. Afanasiev et al. Phys. Rev. Lett 103:142301, 2009.
88. Photon-hadron jet correlations in p+p and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C80:024908, 2009.

89. Systematic studies of elliptic flow measurements in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S. Afanasiev et al. Phys. Rev. C80:024909, 2009.
90. Measurement of bottom versus charm as a function of transverse momentum with electron-hadron correlations in p+p collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 103:082002, 2009.
91. Photoproduction of J/ψ and of high mass e+e- in ultra-peripheral Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S. Afanasiev et al. Phys. Lett. B679:321, 2009.
92. The polarized gluon contribution to the proton spin from the double helicity asymmetry in inclusive π^0 production in polarized p+p collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 103, 012003, 2009.
93. Cold nuclear matter effects on J/ψ production as constrained by deuteron-gold measurements at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C77, 024912, 2008, Err. Ibid.C79:059901, 2009.
94. Inclusive cross section and double helicity asymmetry for π^0 production in p+p collisions at $\sqrt{s} = 62.4$ GeV. A. Adare et al. Phys. Rev. D79:012003, 2009.
95. Dilepton mass spectra in p+p collisions at $\sqrt{s} = 200$ GeV and the contribution from open charm. A. Adare et al. Phys. Lett. B670:313, 2009.
96. Suppression pattern of neutral pions at high transverse momentum in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV and constraints on medium transport coefficients. A. Adare et al. Phys. Rev. Lett. 101:232301, 2008.
97. Onset of π^0 suppression studied in Cu+Cu collisions at $\sqrt{s_{NN}} = 22.4, 62.4,$ and 200 GeV. A. Adare et al. Phys. Rev. Lett. 101:162301, 2008.
98. Charged hadron multiplicity fluctuations in Au+Au and Cu+Cu collisions from $\sqrt{s_{NN}} = 22.5$ to 200 GeV. A. Adare et al. Phys. Rev. C78:044902, 2008.
99. J/ψ production in $\sqrt{s_{NN}} = 200$ GeV Cu+Cu collisions. A. Adare et al. Phys. Rev. Lett. 101:122301, 2008.
100. Dihadron azimuthal correlations in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C78:014901, 2008.
101. Quantitative constraints on the opacity of hot partonic matter from semi-inclusive single high transverse momentum pion suppression in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C77:064907, 2008.
102. Cold nuclear matter effects on J/ψ production as constrained by deuteron-gold measurements at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. C77:024912, 2008.
103. Particle-species dependent modification of jet-induced correlations in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S. Afanasiev et al. Phys. Rev. Lett. 101:082301, 2008.
104. Source breakup dynamics in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV via three-dimensional two-pion source imaging. S. Afanasiev et al. Phys. Rev. Lett. 100:232301, 2008.
105. Centrality dependence of charged hadron production in deuteron-gold and nucleon-gold collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. C77:014905, 2008.

106. Transverse momentum and centrality dependence of dihadron correlations in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV: Jet quenching and the response of partonic matter. A. Adare et al. Phys. Rev. C77:011901, 2008.
107. Elliptic flow for phi mesons and (anti)deuterons in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S. Afanasiev et al. Phys. Rev. Lett. 99:052301, 2007.
108. Correlated production of p and p-bar in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Lett. B649:359, 2007.
109. System size and energy dependence of jet-induced hadron pair correlation shapes in Cu+Cu and Au+Au collisions at $\sqrt{s_{NN}} = 200$ and 62.4 GeV. A. Adare et al. Phys. Rev. Lett. 98:232302, 2007.
110. J/ψ production vs. centrality, transverse momentum, and rapidity in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 98:232301, 2007.
111. J/ψ production vs. transverse momentum and rapidity in p+p collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 98:232002, 2007.
112. Energy loss and flow of heavy quarks in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 98:172301, 2007.
113. Scaling properties of azimuthal anisotropy in Au+Au and Cu+Cu collisions at $\sqrt{s_{NN}} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 98:162301, 2007.
114. Evidence for a long-range component in the pion emission source in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 98:132301, 2007.
115. Centrality dependence of π^0 and η production at large transverse momentum in $\sqrt{s_{NN}} = 200$ GeV d+Au collisions. S.S. Adler et al. Phys. Rev. Lett. 98:127302, 2007.
116. Measurement of direct photon production in p+p collisions at $\sqrt{s} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 98:012002, 2007.
117. A detailed study of high- p_T neutral pion suppression and azimuthal anisotropy in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. C76:034904, 2007.
118. Measurement of single muons at forward rapidity in p+p collisions at $\sqrt{s} = 200$ GeV and implications for charm production. S.S. Adler et al. Phys. Rev. D76:092002, 2007.
119. Inclusive cross section and double helicity asymmetry for π^0 production in p+p collisions at $\sqrt{s} = 200$ GeV: Implications for the polarized gluon distribution in the proton. A. Adare et al. Phys. Rev. D76:051106, 2007.
120. Production of omega mesons at large transverse momenta in p+p and d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. C75:051902, 2007.
121. ***High transverse momentum η meson production in p+p, d+Au and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV.*** S.S. Adler et al. Phys. Rev. C75:024909, 2007.
122. Measurement of density correlations in pseudorapidity via charged particle multiplicity fluctuations in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. C76:034903, 2007.

123. Measurement of high- p_T single electrons from heavy-flavor decays in p+p collisions at $\sqrt{s} = 200$ GeV. A. Adare et al. Phys. Rev. Lett. 97:252002, 2006.
124. Modifications to di-jet hadron pair correlations in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 97:052301, 2006.
125. Nuclear effects on hadron production in d+Au and p+p collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. C74:024904, 2006.
126. Jet properties from dihadron correlations in p+p collisions at $\sqrt{s} = 200$ GeV. S.S. Adler et al. Phys. Rev. D74:072002, 2006.
127. Jet structure from dihadron correlations in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. C73:054903, 2006.
128. An update on the double helicity asymmetry in inclusive mid-rapidity π^0 production for polarized p+p collisions at $\sqrt{s} = 200$ GeV. S.S. Adler et al. Phys. Rev. D73:091102 (R), 2006.
129. Azimuthal angle correlations for rapidity-separated hadron pairs in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 96:222301, 2006.
130. ***Common suppression pattern of η and π^0 mesons at high transverse momentum in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV.*** S.S. Adler et al. Phys. Rev. Lett. 96:202301, 2006.
131. Measurement of identified π^0 and inclusive photon v_2 and implication to the direct photon production in $\sqrt{s_{NN}} = 200$ GeV Au+Au collisions. S.S. Adler et al. Phys. Rev. Lett. 96:032302, 2006.
132. Nuclear modification of electron spectra and implications for heavy quark energy loss in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 96:032301, 2006.
133. ***Single electrons from heavy flavor decays in p+p collisions at $\sqrt{s} = 200$ GeV.*** S.S. Adler et al. Phys. Rev. Lett. 96:032001, 2006.
134. J/ψ production and nuclear effects for d+Au and p+p collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 96:012304, 2006.
135. ***Measurement of transverse single-spin asymmetries for mid-rapidity production of neutral pions and charged hadrons in polarized p+p collisions at $\sqrt{s} = 200$ GeV.*** S.S. Adler et al. Phys. Rev. Lett. 95:202001, 2005.
136. ***Mid-rapidity direct photon production in p+p collisions at $\sqrt{s_{NN}} = 200$ GeV.*** S.S. Adler et al. Phys. Rev. D71:071102, 2005.
137. Formation of dense partonic matter in relativistic nucleus-nucleus collisions at RHIC: Experimental evaluation by the PHENIX Collaboration. K. Adcox et al. Nucl. Phys. A757:1-2, 184-283, 2005.
138. Saturation of azimuthal anisotropy in Au+Au collisions at $\sqrt{s_{NN}} = 62.4$ GeV to 200 GeV. S.S. Adler et al. Phys. Rev. Lett. 94:232302, 2005.
139. Centrality dependence of direct photon production in $\sqrt{s_{NN}} = 200$ -GeV Au+Au collisions. S.S. Adler et al. Phys. Rev. Lett. 94:232301, 2005.

140. Measurement of single electron event anisotropy in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. C72:024901, 2005.
141. Production of phi mesons at mid-rapidity in $\sqrt{s_{NN}} = 200$ -GeV Au+Au collisions at RHIC. S.S. Adler et al. Phys. Rev. C72:014903, 2005.
142. Deuteron and antideuteron production in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 94:122302, 2005.
143. Nuclear modification factors for hadrons at forward and backward rapidities in deuteron-gold collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 94:082302, 2005.
144. Centrality dependence of charm production from single electron measurement in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 94:082301, 2005.
145. Jet structure of baryon excess in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. C71:051902, 2005.
146. Systematic studies of the centrality and $\sqrt{s_{NN}}$ dependence of the $dE_T/d\eta$ and $dN_{ch}/d\eta$ in heavy ion collisions at mid-rapidity. S.S. Adler et al. Phys. Rev. C71:034908, 2005.
147. ***Double helicity asymmetry in inclusive mid-rapidity π^0 production for polarized p+p collisions at $\sqrt{s} = 200$ GeV.*** S.S. Adler et al. Phys. Rev. Lett. 93:202002, 2004.
148. Bose-Einstein correlations of charged pion pairs in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 93:152302, 2004.
149. Measurement of non-random event-by-event fluctuations of average transverse momentum in $\sqrt{s_{NN}} = 200$ -GeV Au+Au and p+p collisions. S.S. Adler et al. Phys. Rev. Lett. 93:092301, 2004.
150. ***J/ ψ production from proton-proton collisions at $\sqrt{s} = 200$ GeV.*** S.S. Adler et al. Phys. Rev. Lett. 92:051802, 2004.
151. High- p_T charged hadron suppression in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. C69:034910, 2004.
152. Identified charged particle spectra and yields in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. C69:034909, 2004.
153. J/ ψ production in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV at the Relativistic Heavy Ion Collider. S.S. Adler et al. Phys. Rev. C69:014901, 2004.
154. ***Mid-rapidity neutral pion production in proton-proton collisions at $\sqrt{s} = 200$ GeV.*** S.S. Adler et al. Phys. Rev. Lett. 91:241803, 2003.
155. Elliptic flow of identified hadrons in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 91:182301, 2003.
156. Scaling properties of proton and anti-proton production in $\sqrt{s_{NN}} = 200$ -GeV Au+Au collisions. S.S. Adler et al. Phys. Rev. Lett. 91:172301, 2003.
157. Absence of suppression in particle production at large transverse momentum in $\sqrt{s_{NN}} = 200$ -GeV d+Au collisions. S.S. Adler et al. Phys. Rev. Lett. 91:072303, 2003.

158. Suppressed π^0 production at large transverse momentum in central Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. S.S. Adler et al. Phys. Rev. Lett. 91:072301, 2003.

CONFERENCE AND WORKSHOP PROCEEDINGS:

1. **Moving Forward in the Era of Quantitative QCD: Transversity 2014 Closing Remarks** C.A. Aidala, Proceedings of the 4th International Workshop on Transverse Polarization Phenomena in Hard Processes (Transversity 2014), Chia, Italy, June 2014. EPJ Web Conf. 85:03001 (2015).
2. **Spin physics: Session summary.** C.A. Aidala, S. Liuti, C. Riedl, Proceedings of the 18th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS2010), Florence, Italy, April 2010. Proceedings of Science DIS2010:018, 2010. arXiv:1007.4563 [hep-ph]
3. **Spin in hadron reactions.** C.A. Aidala. Proceedings of the 18th International Symposium on Spin Physics (SPIN2008), Charlottesville, VA, October 2008. (Invited plenary talk) AIP Conf. Proc. 1149:124, 2009. arXiv:0903.2393 [hep-ex]
4. **Transversity and transverse-momentum-dependent distribution measurements from PHENIX and BRAHMS.** C. Aidala for the PHENIX and BRAHMS Collaborations. Proceedings of the 2nd International Workshop on Transverse Polarization Phenomena in Hard Processes (Transversity 2008), Ferrara, Italy, May 2008. (Invited talk) arXiv:0808.4139 [hep-ex]
5. **Peering into hadronic matter: The Electron-Ion Collider.** C.A. Aidala for the Electron-Ion Collider Collaboration. Proceedings of the 24th Winter Workshop on Nuclear Dynamics, South Padre Island, TX, Apr 2008. (Invited talk) arXiv:0806.4933 [nucl-ex]
6. **Transverse spin at PHENIX: Results and prospects.** C. Aidala for the PHENIX Collaboration. Proceedings of the International Workshop on Transverse Polarisation Phenomena in Hard Processes, Como, Italy, Sep 2005. hep-ex/0512001
7. **Exploring the protons spin at PHENIX.** C. Aidala for the PHENIX Collaboration. Proceedings of the International School of Subnuclear Physics: 42nd Course: How and Where to Go Beyond the Standard Model, Erice, Italy, Aug Sep 2004. hep-ex/0501054
8. **Single-spin transverse asymmetry in neutral pion and charged hadron production at PHENIX.** C. Aidala for the PHENIX Collaboration. Proceedings of the 12th International Workshop on Deep Inelastic Scattering (DIS 2004), Strbske Pleso, Slovakia, Apr 2004. 1059-1062. hep-ex/0410003
9. **Proposed detector upgrade for measuring low-mass lepton pairs in PHENIX.** C. Aidala for the PHENIX Collaboration. Proceedings of the Conference on the Intersections of Particle and Nuclear Physics, New York, NY, May 2003. AIP Conf. Proc. 698:793-796, 2004.
10. **Proposal for a hadron blind detector for PHENIX.** A. Kozlov et al. Presented at the Fourth International Workshop on Ring Imaging Cherenkov Detectors (RICH2002), Pylos, Greece, Jun 2002. physics/0307101
11. **Detector effects on the asymmetry A_1 : The measurability of the polarized structure function g_1 of the proton.** C. Aidala, A. Deshpande, V. Hughes. Proceedings of the Workshop on Polarized Protons at High Energies Accelerator Challenges and Physics Opportunities, Hamburg, Germany, May 1999. 248-251.

PH.D. THESIS:

Measurement of the transverse single-spin asymmetry for mid-rapidity production of neutral pions in polarized p+p collisions at 200 GeV center-of-mass energy. C.A. Aidala. Columbia University, December 2005. hep-ex/0601009

OTHER PUBLICATIONS:

1. **The RHIC Cold QCD Plan for 2017 to 2023: A Portal to the EIC**, E.-C. Aschenauer et al. arXiv:1602.03922
2. **Technical Report of the sPHENIX Hadronic Calorimeter Prototype Simulation Study and the Beam Test Data Analysis.** L. Xue, C. Aidala, S. Beckman, C. Biggs, S. Boose, M. Chiu, A. Franz, Y. Goto, J. Haggerty, X. He, K. Jones, E. Kistenev, W. Lenz, M. Lenz, D. Lynch, E. Mannel, M. McCumber, D. Morrison, J. Nagle, E. OBrien, C. Pinkenburg, S. Polizzo, B. Ramson, J. Rubin, R. Ruggiero, A. Sickles, P. Stankus, S. Stoll, A. Sukhanov, F. Toldo, C. Woody. April 2015. http://www.phenix.bnl.gov/phenix/WWW/publish/hexc/sPHENIX/HCalProtoTB_TechNote.pdf
3. **An Upgrade Proposal from the PHENIX Collaboration.** A. Adare et al. (PHENIX Collaboration). arXiv:1501.06197
4. **Concept for an Electron Ion Collider (EIC) detector built around the BaBar solenoid.** A. Adare et al. (PHENIX Collaboration). arXiv:1402.1209
5. **sPHENIX: An upgrade concept from the PHENIX Collaboration.** C. Aidala et al. arXiv:1207.6378
6. **Polarized Drell-Yan measurements with the Fermilab Main Injector.** C. Aidala et al. FERMILAB-PROPOSAL-1027. <https://inspirehep.net/record/1216817/files/fermilab-proposal-1027.pdf>
7. **Gluons and the quark sea at high energies: Distributions, polarization, tomography.** D. Boer et al. Summary report of the INT program on the science case for the Electron-Ion Collider, Institute for Nuclear Theory, University of Washington, September 13–November 19, 2010. arXiv:1108.1713
8. **Peering into hadronic matter: The Electron-Ion Collider.** C. Aidala. RHIC News article, July 29, 2008 edition. <http://www.bnl.gov/rhic/news/072908/story1.asp>
9. **A high luminosity, high energy electron-ion collider.** C. Aidala et al. White paper prepared for the NSAC Long Range Plan, 2007.
10. **Physics opportunities with e+A collisions at an electron-ion collider.** C. Aidala et al. White paper prepared for the NSAC Long Range Plan, 2007.
11. **Research plan for spin physics at RHIC.** C. Aidala et al. BNL-73798-2005, 2005.
12. **Getting a grip on the Grid: The Data Grid and computing in the 21st century.** C. Aidala. Columbia Science Review, Spring 2004.
13. **Measurement of longitudinal double spin asymmetry for π^0 s in proton-proton collisions at $\sqrt{s} = 200$ GeV from RHIC PHENIX Run-3.** A. Bazilevsky et al. RIKEN Accel. Prog. Rep. 36, 2003.

14. **Feasibility study for measurements of low-mass vector mesons for the PHENIX upgrade.** K. Ozawa et al. Annual Report of the Center for Nuclear Study, University of Tokyo, 2002.