

# Curriculum Vitae

## General

Name : Jiangyong Jia  
Address : State University of New York at Stony Brook, Stony Brook, NY 11790  
USA  
Email : jjia@bnl.gov  
Birth : September 1st, 1974, ShanDong Province, P.R. China.  
Home Phone : 631-632-7905

## Education

- 1992 - 1997: University of Sci. & Tech. of China  
Bachelor of Arts in Physics
- 1997 - 2002: State University of New York at Stony Brook.  
Master of Science in Physics
- 2002 - 2003: State University of New York at Stony Brook.  
Doctor of Philosophy in Physics  
Dissertation Title:  
High- $p_T$  Charged Hadron Suppression in Au+Au Collisions at  $\sqrt{s_{nn}} = 200$  GeV  
Dissertation Date: August 19, 2003

## Professional Experience

Professor at Stony Brook University.  
Since Aug. 2017

Associate Professor at Stony Brook University.  
2012 - 2017

Assistant Professor at Stony Brook University.  
Sep. 2006 - 2012.

Affiliated physicist at Brookhaven National Laboratories.  
Sep. 2006 - present.

Post-doctoral research fellow, Columbia University  
Sep. 2003 - Sep. 2006

## Research Interest

High-energy nuclear and particle physics, Nuclear structure

## Service to profession :

- Member, International advisory committee for Quark Matter 2017, 2018, 2019, 2022, 2023 conferences.
- Local organizing committee for the 7th International Conference on the Initial Stages in High-Energy Nuclear Collisions (IS2023)
- Organizing committee for INT program Intersection of nuclear structure and high-energy nuclear collisions (23-1a) 2023
- Organizing committee for RBRC workshop on Physics Opportunities from the RHIC Isobar Run in 2022
- Organizing committee for EMMI Rapid Reaction Task Force "Nuclear physics confronts relativistic collisions of isobars"
- Organizing committee for the 5th International Conference on the Initial Stages in High-Energy Nuclear Collisions (IS2019,IS2023)
- Member, International organizing committee for ATHIC 2018 conference.
- Organizing committee for the 5th conference on Large Hadron Collider Physics (LHCP2017)
- Member, Local organizing committee for 12th CPOD conference.
- Organizing committee for RBRC workshop on Opportunities for Exploring Longitudinal Dynamics in Heavy Ion Collisions at RHIC, 2016. <https://www.bnl.gov/oeld2016>
- Organizing committee for RBRC workshop on Collectivity in Small Colliding Systems with High Multiplicity, 2015. <http://www.bnl.gov/cscs2015/>
- Organizing committee for Hot Quarks international conference, 2013-
- Member, International advising committee on the ATHIC 2014 conference
- Organizing committee for "Workshop on Jet Quenching at RHIC vs LHC in Light of Recent dAu vs pPb Controls" <http://www.bnl.gov/jqr2013/>
- Local organizing committee for Quark Matter 2012 conference
- Co-author of CERN yellow report on HL-LHC and HE-LHC, 2018
- Co-author of Hot-QCD white paper, 2015
- Co-convener of bulk/corr physics working group in STAR Collaboration, 2017-
- Co-convener of CME focus working group in STAR Collaboration, 2017-
- Co-convener of heavy-ion physics working group in ATLAS Collaboration, 2014-2016

- Co-convener of Photon physics working group in PHENIX Collaboration, Dec. 2009 - Jan 2011
- Co-convener of Hard physics working group in PHENIX Collaboration, Jul. 2004 - Jan. 2007
- Co-organizer of “Recent Advances and Future Directions in Modern Nuclear Science: Graduate Student Research”, The 238th ACS National Meeting, Washington, DC, August 16-20, 2009.
- Co-organizer of “Frontiers of Nuclear Chemistry Research: Graduate Student Research”, 236 ACS National Meeting Aug. 2008.
- Co-organizer of “Symposium in Honor of the Scientific Career of John M. Alexander”, 236 ACS National Meeting Aug. 2008.
- Co-organizer of “Frontiers of Basic and Applied Nuclear Science”, 235 ACS National Meeting April 2008.
- Co-convener of International Symposium of Multi-particle Dynamics, Aug 2007.

#### **Memberships :**

- American Physical Society, since 1997
- American Chemical Society, since 2006
- Sigma-Xi Scientific Research Society, since 2004

#### **Graduate and postdoctoral trainees :**

1. Souvik Paul (Stony Brook), current STAR student.
2. Chuan Sun (Stony Brook), current STAR student.
3. Aman Dmiri (Stony Brook), current ATLAS student.
4. Zhengxi Yan (Stony Brook), current STAR student.
5. S. Bhutta (Stony Brook), current ATLAS student.
6. A. Behera (Stony Brook), ATLAS Thesis: “Study of transverse and longitudinal correlations in heavy ion collisions with the ATLAS detector”, May 2021
7. C. Zhang (Stony Brook), STAR Thesis: “A Study on Collectivity, Correlations, and Fluctuations in Relativistic Heavy Ion Collisions in STAR”, Dec 2019
8. M. Zhou (Facebook), ATLAS Thesis: “Study of particle correlation and fluctuation from nucleus-nucleus collisions to proton-proton collisions with the ATLAS detector at the LHC”, March 2019
9. P. Huo (J.P Morgan), ATLAS Thesis: “Measurements of event-by-event fluctuation of anisotropic flow in  $pp$ ,  $p+Pb$  and  $Pb+Pb$  collisions with the ATLAS detector”, Aug 2018
10. M. Nie (Shandong University), STAR Thesis : “Investigation of Anisotropic flow in Heavy Ion Collisions”, May 2018

11. S. Radhakrishnan (LBNL), ATLAS thesis : “Study of long-range azimuthal and longitudinal correlations in high energy nuclear collisions at the LHC using the ATLAS detector”, August 2016
12. T. Balestri (private sector), ATLAS thesis: “W Boson Production in Ultrarelativistic Heavy-Ion Collisions at the CERN LHC”, May 2016
13. D. Reynolds (private sector), PHENIX thesis: “Measurement of the Elliptic and Triangular Flow in Ultra-Relativistic Cu+Cu and Au+Au Collisions at 200 GeV”, December 2015
14. Y. Gu (private sector), PHENIX thesis: “Measurement of the Azimuthal Anisotropy for Particle Identified Charged Hadrons in Au + Au Collisions via Long-Range Two-Particle Correlation Method at 200, 62.4 and 39 GeV”, May 2014.
15. S. Mohapatra (Columbia University), ATLAS thesis: “Measurement of Azimuthal Anisotropy for Charged Particle Production in Pb+Pb Collisions at 2.76 TeV and in p+Pb Collisions at 5.02 TeV with the ATLAS Detector at the LHC”, Aug 2013.
16. X. Gong (private sector), PHENIX thesis: “Azimuthal Anisotropy Measurement of Neutral Pion and Inclusive Charge Hadron Production in Au+Au Collisions at 62 and 39 GeV”, August 2012.
17. R. Wei (private sector), PHENIX thesis: “High pT Azimuthal Anisotropy in Au+Au Collisions at 200 GeV”, Aug 2010.

### Main Research Contributions :

1. 2019–2022: Propose new imaging method of the structure of atomic nuclei using high-energy nuclear collisions. This method also provides a new way to constraint the initial condition of the Quark Gluon Plasma.
2. 2017–2018: Propose cumulant method of flow and multiplicity to study the centrality fluctuations in heavy ion collisions. Successful application of the method to Pb+Pb data in ATLAS.
3. 2016–2017: Propose subevents multi-particle cumulant method to suppress jet and dijet non-flow in small collision systems. Successful application of the method to pp and pPb data in ATLAS. Provide further and more direct evidence that  $v_2$  persists to low  $N_{ch}$  in small collision systems.
4. 2016–2017: Propose and successful application of many new observables to study the flow decorrelations effects in PbPb collisions, which provide details information on EbyE fluctuations of flow along  $\eta$  direction. This include a first observation that flow decorrelation effects are stronger at lower  $\sqrt{s}$  energy.
5. 2015–2016: Propose and successful application of a new method for studying the forward-backward multiplicity correlation in HI collisions, which allow complete removal of volume effects and differential separation of short-range (SRC) and long-range (LRC) in  $\eta_1$  and  $\eta_2$  space. Observation that the LRC is dominated by a linear FB asymmetry ( $a_1$ ) whose amplitude are same in pp, pPb and PbPb collisions and is only controlled by  $N_{ch}$ .

6. 2013–2017: Development, optimization and long-term support of the high-multiplicity triggers (HMT) and event-shape triggers (EST) in pp, pPb and PbPb collision in ATLAS. These triggers proved crucial for timely and several discovery measurements of long-range ridge in pp and pPb collisions.
7. 2012–2014: Observation of the double-ridge in pPb collisions, this is followed up by a detailed differential measurement of the  $v_1$ – $v_5$  in  $p_T$  and  $\eta$ .
8. 2012–2015: Development of multiple methods and measurements of several EbyE flow observables in HI collisions, including probability distribution of flow harmonics  $p(v_n)$ , event-plane correlations, and correlation between flow amplitudes. They are published in 3 ATLAS papers and 6 independent papers.
9. 2010–2012: Detailed study of the flow harmonics in PbPb collisions, including proposing and application of a novel method to subtract the momentum conservation effects and obtain the rapidity-even dipolar flow  $v_1$ .
10. 2008–2010: Measurement in PHENIX of high- $p_T$   $v_2$  of  $\pi^0$  and  $\eta$  meson to provide constraint on the path-length dependence of energy loss mechanisms.
11. 2004–2008: Systematic study in PHENIX of di-hadron correlations in pp, dAu and AuAu collisions, including a detailed characterization of the properties of near-side and away-side ridge correlations as well as the near-side and away-side jet correlations.
12. 2002–2004: Development and support of the PHENIX DAQ software (Event Builder), development of the Level2 high- $p_T$  charge hadron triggers.
13. 2000–2003: Contribution to the discovery of the jet quenching by PHENIX (mainly through the charged hadron measurement), one of the main contributors for the observation of absence of jet quenching in dAu collisions. Developed a background subtraction method which enables measurement of charged hadrons to high  $p_T$ , subsequently performed a detailed measurement of the suppression pattern of high- $p_T$  charged hadrons.

**Refereed Articles (First author) :**

1. Rupam Samanta, Somadutta Bhatta, Jiangyong Jia, Matthew Luzum, Jean-Yves Ollitrault “Thermalization at the femtoscale seen in high-energy Pb+Pb collisions”, 2303.15323 [nucl-th]
2. Aman Dimri, Somadutta Bhatta, Jiangyong Jia, “Impact of nuclear shape fluctuations in high-energy heavy ion collisions”, Eur.Phys.J.A 59 (2023) 3, 45, 2301.03556 [nucl-th]
3. Somadutta Bhatta, Aman Dimri, Jiangyong Jia, “Energy dependence of heavy-ion initial condition in isobar collisions”, 2301.01294 [nucl-th]
4. Jiangyong Jia, “Imaging the initial condition of heavy-ion collisions and nuclear structure across the nuclide chart ”, arXiv:2209.11042 [nucl-ex]
5. Lu-meng Liu, Chunjian Zhang, Jia Zhou, Jun Xu, Jiangyong jia et. al. “Free spectator nucleons in ultracentral relativistic heavy-ion collisions as a probe of neutron skin”, Phys.Rev.C 106 (2022) 034913, 2209.03106 [nucl-th]

6. Maowu Nie, Chunjian Zhang, Zhenyu Chen, Li Yi, Jiangyong Jia, “Impact of nuclear deformation on longitudinal flow decorrelations in high-energy isobar collisions”, arXiv:2208.05416 [nucl-th]
7. Jiangyong Jia, Giuliano Giacalone, Chunjian Zhang, “Separating the impact of nuclear skin and nuclear deformation on elliptic flow and its fluctuations in high-energy isobar collisions”, Phys.Rev.Lett. 131 (2023) 2, 022301, arXiv:2206.10449 [nucl-th]
8. Jiangyong Jia, Giuliano Giacalone, Chunjian Zhang, “Precision tests of the non-linear mode coupling of anisotropic flow via high-energy collisions of isobars”, Chin.Phys.Lett. 40 (2023) 4, 042501, arXiv:2206.07184 [nucl-th]
9. Jiangyong Jia, Chunjian Zhang, “Ratios of collective flow observables in high-energy isobar collisions are insensitive to final state interactions”, Phys. Rev. C 106.L031901, arXiv:2206.01943 [nucl-th]
10. Jiangyong Jia, Gang Wang, Chunjian Zhang, “Impact of event activity variable on the ratio of observables in isobar collisions”, Phys. Lett. B 833, 137312 (2022), arXiv:2203.12654 [nucl-th]
11. Somadutta Bhatta, Jiangyong Jia, ATLAS, “Correlations between flow and transverse momentum in Xe+Xe and Pb+Pb collisions at the LHC with the ATLAS detector: a probe of the heavy-ion initial state and nuclear deformation”, Phys.Rev.C 107 (2023) 5, 054910 , arXiv:2205.00039 [nucl-ex]
12. Lu-meng Liu, Chunjian Zhang, Jia Zhou, Jun Xu, Jiangyong jia et. al “Probing neutron-skin thickness with free spectator neutrons in ultracentral high-energy isobaric collisions”, Phys. Lett. B 834, 137441 (2022), arXiv:2203.09924 [nucl-th]
13. Somadutta Bhatta, Chunjian Zhang, Jiangyong Jia, “Higher-order transverse momentum fluctuations in heavy-ion collisions”, Phys.Rev.C 105 (2022) 2, 024904, arXiv:2112.03397 [nucl-th]
14. Jiangyong Jia, Chunjian Zhang, “Scaling approach to nuclear structure in high-energy heavy-ion collisions”, Phys.Rev.C 107 (2023) 2, L021901, arXiv:2111.15559 [nucl-th]
15. Chunjian Zhang, Jiangyong Jia, “Evidence of Quadrupole and Octupole Deformations in Zr96+Zr96 and Ru96+Ru96 Collisions at Ultrarelativistic Energies” Phys.Rev.Lett. 128 (2022) 2, 022301, arXiv:2109.01631 [nucl-th]
16. Jiangyong Jia, “Probing triaxial deformation of atomic nuclei in high-energy heavy ion collisions”, **editor suggestion**, Phys.Rev.C 105 (2022) 4, 044905, arXiv:2109.00604 [nucl-th]
17. Jiangyong Jia, “Shape of atomic nuclei in heavy ion collisions”, **editor suggestion**, Phys.Rev.C 105 (2022) 1, 014905, arXiv:2106.08768 [nucl-th]
18. Jiangyong Jia, Shengli Huang, Chunjian Zhang “Constraining nuclear quadrupole deformation from correlation of elliptic flow and transverse momentum in nuclear collisions,” Phys.Rev.C 105 (2022) 1, 014906, arXiv:2105.05713 [nucl-th]

19. Giuliano Giacalone, Jiangyong Jia, Chunjian Zhang “The impact of nuclear deformation on relativistic heavy-ion collisions: assessing consistency in nuclear physics across energy scales ,” Phys.Rev.Lett. 127 (2021) 24, 242301, arXiv:2105.01638 [nucl-th]
20. Giuliano Giacalone, Jiangyong Jia, Vittorio Somà “Accessing the shape of atomic nuclei with relativistic collisions of isobars,” Phys.Rev.C 104 (2021) 4, L041903, arXiv:2102.08158 [nucl-th].
21. Chunjian Zhang, Arabinda Behera, Somadutta Bhatta, Jiangyong Jia, “Non-flow effects in correlation between harmonic flow and transverse momentum in nuclear collisions,” Phys.Lett. B 822 (2021) 136702, arXiv:2102.05200 [nucl-th].
22. J. Jia, A. Behera and ATLAS Collaboration, “Longitudinal flow decorrelations in Xe+Xe collisions at  $\sqrt{s_{NN}} = 5.44$  TeV with the ATLAS detector,” Phys. Rev. Lett. **126**, 122301 (2021), arXiv:2001.04201 [nucl-ex].
23. A. Behera, M. Nie and J. Jia, “Longitudinal eccentricity decorrelations in heavy ion collisions,” Phys. Rev. Res. **2**, no.2, 023362 (2020), arXiv:2003.04340 [nucl-th].
24. Z. Liu, A. Behera, H. Song and J. Jia, “Robustness of principal component analysis on harmonic flow in heavy ion collisions,” Phys. Rev. C **102**, no.2, 024911 (2020), arXiv:2002.06061 [nucl-ex].
25. J. Jia, C. Zhang and J. Xu, “Centrality fluctuations and decorrelations in heavy-ion collisions,” Phys. Rev. Res. **2**, no.2, 023319 (2020), arXiv:2001.08602 [nucl-th].
26. J. Jia, S. Y. Wei, B. W. Xiao and F. Yuan, “Medium-Induced Transverse Momentum Broadening via Forward Dijet Correlations,” Phys. Rev. D **101**, no.9, 094008 (2020), arXiv:1910.05290 [hep-ph].
27. Maowu Nie, Li Yi, Jiangyong Jia, Guoliang Ma, “Influence of initial-state momentum anisotropy on the final-state collectivity in small collision systems,” Phys. Rev. C **100**, 064905 (2019), arXiv:1906.01422
28. Shengli Huang, Zhenyu Chen, Jiangyong Jia, Wei Li “Disentangle contributions to small-system collectivity via scans of light nucleus-nucleus collisions,” Phys. Rev. C **101**, 021901 (2020), arXiv:1904.10415 [nucl-th]
29. J. Jia, M. Zhou and ATLAS Collaboration, “Fluctuations of anisotropic flow in Pb+Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV with the ATLAS detector,” JHEP **01**, 051 (2020), arXiv:1904.04808 [nucl-ex].
30. C. Zhang, J. Jia and J. Xu, “Non-flow effects in three-particle mixed-harmonic azimuthal correlations in small collision systems,” Phys. Lett. B **792**, 138(2019), arXiv:1812.03536 [nucl-th]
31. J. Jia, P. Huo and ATLAS Collaboration, “Correlated long-range mixed-harmonic fluctuations measured in  $pp$ ,  $p+Pb$  and low-multiplicity Pb+Pb collisions with the ATLAS detector,” Phys. Lett. B **789**, 444-471 (2019), arXiv:1807.02012 [nucl-ex].

32. Mingliang Zhou, Jiangyong Jia, “Centrality fluctuations in heavy-ion collisions,” Phys. Rev. C **98**, 044903 (2018), arXiv:1803.01812 [nucl-th]
33. Nie:2018xog M. W. Nie, P. Huo, J. Jia and G. L. Ma, “Multiparticle azimuthal cumulants in  $p$ +Pb collisions from a multiphase transport model,” Phys. Rev. C **98**, 034903 (2018), arXiv:1802.00374.
34. J. Jia, P. Huo and ATLAS Collaboration “Measurement of longitudinal flow decorrelations in Pb+Pb collisions at  $\sqrt{s_{NN}} = 2.76$  and 5.02 TeV with the ATLAS detector,” Eur. Phys. J. C **78**, 142 (2018), arXiv:1709.02301 [nucl-ex].
35. J. Jia, M. Zhou and ATLAS Collaboration, “Measurement of long-range multiparticle azimuthal correlations with the subevent cumulant method in  $pp$  and  $p + Pb$  collisions with the ATLAS detector at the CERN Large Hadron Collider,” Phys. Rev. C **97**, 024904 (2018), arXiv:1708.03559.
36. Peng Huo, Katarina Gajdosova, Jiangyong Jia, You Zhou, Phys. Lett. B **777**, 201 (2018), arXiv:1710.07567. “Importance of non-flow in mixed-harmonic multiparticle correlations in small collision systems”
37. J. Jia, M. Zhou and A. Trzupek, “Revealing long-range multi-particle collectivity in small collision systems via subevent cumulants,” Phys. Rev. C **96**, 034906, (2017), arXiv:1701.03830 [nucl-th].
38. J. Jia, P. Huo, G. Ma, and M. Nie, “Observables for longitudinal flow correlations in heavy-ion collisions ,” J. Phys. G **44**, 075106, arXiv:1701.02183 [nucl-th].
39. J. Jia, S. Radhakrishnan, M. Zhou and ATLAS Collaboration, “Measurement of forward-backward multiplicity correlations in lead-lead, proton-lead and proton-proton collisions with the ATLAS detector,” Phys. Rev. C **95**, 064914 (2017), arXiv:1606.08170 [nucl-th].
40. J. Jia, S. Radhakrishnan and M. Zhou, “Forward-backward multiplicity fluctuation and longitudinal harmonics in high-energy nuclear collisions,” Phys. Rev. C **93**, 044905 (2016), arXiv:1506.03496 [nucl-th].
41. Jiangyong Jia and Soumya Mohapatra, ATLAS Collaboration, “Measurement of the correlation between flow harmonics of different order in lead-lead collisions at  $\sqrt{s_{NN}}=2.76$  TeV with the ATLAS detector,” Phys. Rev. C **92**, 034903 (2015), arXiv:1504.01289 [hep-ex].
42. J. Jia and Sooraj Krishnann, “Limitation of multi-particle correlations for studying the event-by-event distribution of harmonic flow in heavy-ion collisions,” Phys. Rev. C **92**, 024911 (2015), arXiv:1412.4759 [nucl-ex].
43. J. Jia and Sooraj Krishnann, ATLAS Collaboration, “Measurement of long-range pseudorapidity correlations and azimuthal harmonics in  $\sqrt{s_{NN}} = 5.02$  TeV proton-lead collisions with the ATLAS detector”, Phys. Rev. C **90**, 044906, arXiv:1409.1792.
44. J. Jia and Thomas Balestri, ATLAS Collaboration, “Measurement of the production and lepton charge asymmetry of  $W$  bosons in Pb+Pb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV with the ATLAS detector,” Eur. Phys. J. C **75**, 23 (2015) [arXiv:1408.4674 [hep-ex]].



45. J. Jia, “Event-shape fluctuations and flow correlations in ultra-relativistic heavy-ion collisions”, invited review, *J. Phys. G* **41**, 124003 (2014), arXiv:1407.6057 [nucl-th].
46. J. Jia and P. Huo, “Forward-backward eccentricity and participant-plane angle fluctuations and their influences on longitudinal dynamics of collective flow,” *Phys. Rev. C* **90**, 034915 (2014), arXiv:1403.6077 [nucl-th].
47. J. Jia and P. Huo, “A method for studying the rapidity fluctuation and decorrelation of harmonic flow in heavy-ion collisions,” *Phys. Rev. C* **90**, 034905 (2014), arXiv:1402.6680 [nucl-th].
48. Jianguyong Jia and Soumya Mohapatra, ATLAS Collaboration, “Measurement of event-plane correlations in  $\sqrt{s_{NN}}=2.76$  TeV lead-lead collisions with the ATLAS detector,” *Phys. Rev. C*. **90**, 024905 (2014), arXiv:1403.0489 [hep-ex].
49. Peng Huo, Jianguyong Jia\*, Soumya Mohapatra, “Elucidating the event-by-event flow fluctuations in heavy-ion collisions via the event shape selection technique”, *Phys. Rev. C*. **90**, 024910 (2014), arXiv:1311.7091
50. Jianguyong Jia, Soumya Mohapatra, ATLAS Collaboration, “Measurement of the distributions of event-by-event flow harmonics in lead–lead collisions at  $\sqrt{s_{NN}}=2.76$  TeV with the ATLAS detector at the LHC”, *JHEP* **11** (2013) 183
51. Jianguyong Jia, Rui Wei, PHENIX Collaboration, “Azimuthal anisotropy of pi0 and eta mesons in Au+Au collisions at  $\sqrt{s_{NN}}=200$  GeV”, *Phys.Rev. C***88** (2013) 064910.
52. Jianguyong Jia, Soumya Mohapatra, “Disentangling flow and nonflow correlations via Bayesian unfolding of the event-by-event distributions of harmonic coefficients in ultrarelativistic heavy-ion collisions,” *Phys. Rev. C* **88**, 014907 (2013)
53. Jianguyong Jia and Derek Teaney, “Study on initial geometry fluctuations via participant plane correlations in heavy ion collisions: part II,” *Eur. Phys. J. C* **73**, 2558 (2013)
54. Jianguyong Jia, Soumya Mohapatra, “A method for studying initial geometry fluctuations via event plane correlations in heavy ion collisions,” *Eur. Phys. J. C* **73**, 2510 (2013)
55. Jianguyong Jia, Soumya Mohapatra, ATLAS Collaboration, “Observation of Associated Near-side and Away-side Long-range Correlations in  $\sqrt{s_{NN}}$  TeV Proton-lead Collisions with the ATLAS Detector”, *Phys. Rev. Lett.* **110**, 182302 (2013)
56. Jianguyong Jia, Sooraj K. Radhakrishnan, Soumya Mohapatra, “A study of the anisotropy associated with dipole asymmetry in heavy ion collisions,” *J. Phys. G* **40**, 105108, (2013)
57. Jianguyong Jia, “Azimuthal anisotropy in a jet absorption model with fluctuating initial geometry in heavy ion collisions,” *Phys. Rev. C* **87**, 061901 (2013)

58. Jiangyong Jia, Soumya Mohapatra, ATLAS Collaboration, “Measurement of the azimuthal anisotropy for charged particle production in  $\sqrt{s_{NN}} = 2.76$  TeV lead-lead collisions with the ATLAS detector”, **editor suggestion** Phys. Rev. C **86**, 014907 (2012)
59. J. Jia, W. A. Horowitz and J. Liao, “A study of the correlations between jet quenching observables at RHIC,” Phys. Rev. C **84**, 034904 (2011)
60. A. Adare *et al.* [PHENIX Collaboration], “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,” Phys. Rev. Lett. **105**, 142301 (2010)
61. J. Jia and R. Wei, “Dissecting the role of initial collision geometry for jet quenching observables in relativistic heavy ion collisions,” Phys. Rev. C **82**, 024902 (2010)
62. J. Jia, “Influence of the nucleon-nucleon collision geometry on the determination of the nuclear modification factor for n-A and A-A collisions,” Phys. Lett. B **681**, 320 (2009)
63. J. Jia, S. Esumi and R. Wei, “Away-side asymmetry of jet correlation relative to reaction plane: a sensitive probe for jet in-medium modifications,” Phys. Rev. Lett. **103**, 022301 (2009)
64. J. Jia and R. Lacey, “Influence of quenched jets on di-hadron correlations,” Phys. Rev. C **79**, 011901(R) (2009)
65. A. Adare *et al.* [PHENIX Collaboration], “Dihadron correlations in Au+Au collisions at  $\sqrt{s_{NN}}=200$  GeV” Phys. Rev. C **78**,014901 (2008)
66. A. Adare *et al.* [PHENIX Collaboration], “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,” Phys. Rev. C **77**, 011901, (2008)
67. J. Jia and C. Zhang, “Quark number scaling of  $v(2)$  in transverse kinetic energy and its implications for coalescence models” Phys. Rev. C **75**, 031901 (2007).
68. S.S. Adler *et al.* [PHENIX Collaboration], “Jet Structure in d+Au collisions at  $\sqrt{s_{NN}}=200$  GeV” Phys. Rev. **C73**, 054903 (2006).
69. A. Drees, H. Feng, J. Jia, “Medium induced jet absorption at RHIC” Phys. Rev.**C71** 034909,(2005).
70. S.S. Adler *et al.* [PHENIX Collaboration], “High- $p_T$  Charged Hadron Suppression in  $Au + Au$  Collisions at  $\sqrt{s_{NN}} = 200$  GeV” Phys. Rev. **C69**, 034910 (2004).

71. K. Adcox *et al.* [PHENIX Collaboration],  
“Centrality Dependence of the High  $p_T$  Charged Hadron Suppression in Au+Au collisions at  $\sqrt{s_{NN}} = 130$  GeV”  
Phys. Lett. B **561**, 82 (2003).

**Refereed Articles (Primary co-author) :**

1. Z. Citron, *et al.*, “Future physics opportunities for high-density QCD at the LHC with heavy-ion and proton beams,” arXiv:1812.06772 [nucl-ex].
2. Mao-Wu Nie, Peng Huo, Jiangyong Jia, Guo-Liang Ma Phys.Rev. C **98**, 034903 (2018), arXiv:1802.00374.
3. S. Mohapatra, B. Cole, T. Xiao, J. Jia, I. Grabowska-Bold [ATLAS Collaboration], Phys. Rev. Lett. **116**, 172301 (2016), arXiv:1509.04776 [hep-ex].
4. Y. Akiba, A. Angerami, H. Caines, A. Frawley, U. Heinz, B. Jacak, J. Jia and T. Lappi *et al.*, “The Hot QCD White Paper: Exploring the Phases of QCD at RHIC and the LHC,” arXiv:1502.02730 [nucl-ex].
5. R. A. Lacey, A. Taranenko, J. Jia, D. Reynolds, N. N. Ajitanand, J. M. Alexander, Y. Gu and A. Mwai, Phys. Rev. Lett. **112** (2014) 082302.
6. E. Richardson *et al.*, “A Reaction Plane Detector for PHENIX at RHIC,” Nucl. Inst. and Meth. A **636**, 99 (2011)
7. R. A. Lacey, R. Wei, N. N. Ajitanand, J. M. Alexander, J. Jia and A. Taranenko, “Glauber-based evaluations of the odd moments of the initial eccentricity relative to the even order participant planes,”  
Phys. Rev. C **84**, 027901 (2011)
8. R. A. Lacey *et al.*, “Azimuthal anisotropy: transition from hydrodynamic flow to jet suppression,”  
Phys. Rev. C **82**, 034910 (2010)
9. R. A. Lacey *et al.*, “Constraints on models for the initial collision geometry in ultra relativistic heavy ion collisions,”  
Phys. Rev. C **81**, 061901 (2010)
10. R. A. Lacey *et al.*, “Energy loss for heavy quarks in relation to light partons: is radiative energy loss for heavy quarks anomalous?,”  
Phys. Rev. Lett. **103**, 142302 (2009)
11. R. A. Lacey, N. N. Ajitanand, J. M. Alexander, X. Gong, J. Jia, A. Taranenko and R. Wei, “Scaling patterns of jet suppression in Au+Au collisions at  $\sqrt{s_{NN}} = 200$  GeV: Links to the transport properties of the QGP,”  
Phys. Rev. C **80**, 051901 (2009)
12. A. Adare *et al.* [PHENIX Collaboration], “Onset of pi-zero suppression studied in Cu+Cu collisions at  $\sqrt{s_{NN}} = 22.4, 62.4, \text{ and } 200$  GeV”  
Phys. Rev. Lett. **101**, 162301 (2008).

13. S. S. Adler *et al.* [PHENIX Collaboration],  
“Centrality dependence of charged hadron production in deuteron+gold and nucleon+gold collisions at  $\sqrt{s_{NN}}=200$  GeV,”  
Phys. Rev. C **77**, 014905, (2008)
14. S.S. Adler *et al.* [PHENIX Collaboration],  
“Jet Properties from Di-Hadron Correlations in p+p Collisions at  $\sqrt{s} = 200$  GeV”  
Phys. Rev. D **74**, 072002 (2006).
15. R. A. Lacey, N. N. Ajitanand, J. M. Alexander, P. Chung, J. Jia, A. Taranenko and P. Danielewicz, “An estimate for the location of QCD critical end point,”  
arXiv:0708.3512 [nucl-ex].
16. S.S. Adler *et al.* [PHENIX Collaboration],  
“Absence of Suppression in Particle Production at Large Transverse Momentum in  $\sqrt{s_{NN}} = 200$  GeV  $d - Au$  Collisions”  
Phys. Rev. Lett. **91**, 072303 (2003).
17. K. Adcox *et al.* [PHENIX Collaboration],  
“Suppression of Hadrons with Large Transverse Momentum in Central Au+Au Collisions at  $\sqrt{s_{NN}} = 130$  GeV”  
Phys. Rev. Lett. **88**, 022301 (2002).

#### Other Refereed Articles :

1. More than 400 refereed articles from PHENIX and STAR
2. More than 1000 refereed articles from ATLAS

#### Invited and Contributed Talks with proceedings :

1. “Flow and Centrality fluctuations from ATLAS”, Proceedings for the XXVI Quark Matter conference, Nov. 3 - Nov. 8 2019, Wuhan (China).  
Nuclear Physics **A1005**, 121761 (2020)
2. “Heavy Ion Results from ATLAS”, Proceedings for the XXVI Quark Matter conference, Feb. 5 - Feb. 11 2017, Chicago (USA).  
Nuclear Physics **A967**, 51 (2017)
3. “Forward-backward multiplicity correlations in PbPb, pPb and pp collisions from ATLAS”, Proceedings for the XXV Quark Matter conference, Sep. 27 - Oct. 3 2015, Kobe (Japan),  
Nucl. Phys. **A956**, 405 (2016), arXiv:1601.01296
4. “Collective phenomena in high-energy nuclear collisions” Proceedings for the XXIV Quark Matter conference, May 19-24 2014, Darmstadt (Germany),  
Nucl. Phys. A **931**, 216 (2014), arXiv:1408.0066
5. “Long-range correlations in proton-lead collisions at  $\sqrt{s_{NN}} = 5.02$  TeV from ATLAS,” Proceedings for the 29th Winter Workshop On Nuclear Dynamics, February 3-10, 2013, Squaw Valley, California, USA  
J.Phys.Conf.Ser. **458** 012023, (2013) arXiv:1305.2971

6. "Measurement of the distributions of event-by-event flow harmonics in Pb-Pb Collisions at  $\sqrt{s_{NN}}=2.76$  TeV with the ATLAS detector," Proceedings for the XXIII International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions, Quark Matter 2012, Aug 13-18, 2012, Washington DC., USA  
Nucl. Phys. **A904**, 421 (2013), arXiv:1209.4232
7. "Measurement of the rapidity-even dipolar flow in Pb-Pb collisions with the ATLAS detector," Proceedings for the 28th Winter Workshop on Nuclear Dynamics, Dorado Del Mar, Puerto Rico, United States Of America, 7 - 14 Apr 2012  
J.Phys.Conf.Ser. **389** 012013, (2012), arXiv:1208.1874 [nucl-ex].
8. "Measurement of Event Plane Correlations in Pb-Pb Collisions at  $\sqrt{s_{NN}}=2.76$  TeV with the ATLAS Detector," Proceedings for Hard Probes 2012, Cagliari, Italy,  
Nucl. Phys. **A910**, 276 (2013), arXiv:1208.1427 [nucl-ex].
9. "Measurement of elliptic and higher order flow from ATLAS experiment at the LHC", XXII International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions, Quark Matter 2011 May 22-28, 2011, Annecy, France  
J. Phys. G **38**, 124012 (2011)
10. "Zeroing in on jet quenching: a PHENIX perspective," The 4th International Conference on Hard and Electromagnetic Probes of High Energy Nuclear Collisions (Hard Probes 2010), Oct 10-15, 2010, Eilat, Israel. Nucl. Phys. **A855**, 92-100 (2011).
11. "Probing The Properties Of The Strongly-Interacting Quark Gluon Plasma At Rhic," Proceedings of 10th International Conference On Nucleus-Nucleus Collisions (NN 2009), 16-21 Aug 2009, Beijing, China.  
Nucl. Phys. A **834**, 229C (2010).
12. "Understanding the Role of Jet and Underlying Event in p+p and d+Au Collisions from PHENIX at RHIC," Poster proceedings of Quark Matter 2009 conference. arXiv:0906.3776 [nucl-ex].
13. "ATLAS Heavy Ion Physics Program,"  
To appear in Proceedings of "34th International Conference on High Energy Physics (ICHEP 2008)", July 29 - Aug. 5, 2008 Philadelphia, PA  
e-Print: arXiv:0810.4536 [nucl-ex].
14. "How to Make Sense of the Jet Correlations Results at RHIC?"  
Eur. Phys. J. C **62**, 255 (2009)  
Proceedings of "Hot Quarks 2008": August 18-23, 2008 in Aspen Lodge, Estes Park, Colorado, USA
15. "Understanding jet quenching and medium response with di-hadron correlation,"  
J. Phys. G **35**, 104033, (2008).  
Reprinted in J. Alam *et al.*, ed., Proceedings of Quark Matter 2008: 20th International Conference on Ultra-Relativistic Nucleus Nucleus Collisions.
16. "Probe the QGP via dihadron correlations: Jet quenching and Medium-response"  
Acta Phys. Polon. Supp. 1:605-608,2008.

17. "Mapping out the Jet correlation landscape: Jet quenching and Medium response"  
Published in W. Bauer, R. Bellwied and J.W. Harris, ed., Proceedings of the 23rd Winter Workshop on Nuclear Dynamics" (EP Systema, Budapest, Hungary, 2007 ISBN 978-963-8693426) pp. 65-72  
e-Print: arXiv:0705.3060 [nucl-ex]
18. "Mapping out the jet correlation landscape: A Perspective from PHENIX experiment."  
Int. J. Mod. Phys. **E 16**:3058-3081, (2008).  
Reprint in 11th International Workshop on Correlation and Fluctuation in Multiparticle Production.
19. " $\pi^0$ -h correlation in Cu + Cu at  $\sqrt{s_{NN}} = 200$ -GeV.  
Int. J. Mod. Phys. **E 16**:2000-2004, (2007).
20. "Ways to constrain the away side jet in Au + Au collisions in PHENIX"  
Nucl. Phys. **A783**:501-506,2007.  
Reprint in Proceedings of 2nd International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions (HP 2006).
21. "Some thoughts on di-jet correlation in Au + Au collisions from PHENIX"  
AIP Conf.Proc.842:116-118,2006.
22. "From mach cone to reappeared jet: What do we learn from PHENIX results on non-identified jet correlation?"  
AIP Conf.Proc.828:219-225,2006.  
Reprint in XXXV The International Symposium on Multiparticle Dynamics (ISMD 2005)
23. "Di-jet correlation in Au + Au and Cu + Cu collisions from PHENIX."  
Acta Phys.Hung. **A27**:231-235,2006.  
Proceedings of 18th International Conference on Ultrarelativistic Nucleus-Nucleus Collisions: Quark Matter 2005 (QM 2005), Budapest, Hungary, 4-9 Aug 2005;
24. "Jet properties from  $\pi^\pm - h^\pm$  correlation in p + p and d + Au collisions."  
AIP Conf.Proc.792:796-802,2005.  
Proceedings of 13th International Workshop on Deep Inelastic Scattering (DIS 05), Madison, Wisconsin, 27 Apr - 1 May 2005;
25. "Jet properties from  $\pi^\pm - h^\pm$  correlation in p + p and d + Au collisions at  $\sqrt{s_{NN}} = 200$ -GeV",  
J. Phys. Conf. Ser. **27**:52,2005. Proceedings of Workshop on Correlations and Fluctuations in Relativistic Nuclear Collisions, Cambridge, Massachusetts, 21-23 Apr 2005.
26. "Probing jet properties via two-particle correlation method"  
J. Phys **G31**, S521 (2005).  
Proceedings of Hot Quark Matter 2004, Jul. 2004, Taos Valley, New Mexico,
27. "High momentum charged particle production in Au + Au collisions at RHIC"  
Nucl. Phys. **A715**, 769 (2003).

Proceedings of 16th International Conference on Ultrarelativistic Nucleus-Nucleus Collisions: Quark Matter 2002 (QM 2002), Jul. 2002, Nantes, France.

**Invited and Contributed Talks without proceedings :**

1. “Nuclear structure imaging in high-energy nuclear collisions”, 7th International Conference on the Initial Stages in High-Energy Nuclear Collisions, June 19-23, 2023, Copenhagen. <https://indico.cern.ch/event/1043736/>
2. “Nuclear shape imaging in high-energy nuclear collisions”, Exploring Quark-Gluon Plasma through soft and hard probes, May 29-31, 2023. Serbian Academy of Science and Arts, Belgrade, Serbia, <https://indico.ipb.ac.rs/event/554/>
3. “Nuclear shape imaging in high-energy nuclear collisions”, Shape Coexistence Workshop, May 1-5, 2023. University of Guelph, Canada <https://www.physics.uoguelph.ca/shape-coexistence-workshop-2023>
4. “Flow and its fluctuations at ATLAS– a perspective in large systems”, India lectures on Heavy Ion Collision experiments for students and postdocs, March 9, 2023. <https://indico.tifr.res.in/indico/conferenceDisplay.py?confId=8740>
5. “Nuclear structure connection of heavy ion collisions”, Online seminar for the TMEP (Transport model evaluation project) taskforce. Feb 22, 2023.
6. “Isobar collisions as precision nuclear structure probes” in INT program on Intersection of nuclear structure and high-energy nuclear collisions, Jan 23-Feb 24, 2023.
7. “Relativistic heavy ion initial states”, EICUG 2nd detector meeting, Stony Brook University, CFNS, Dec 7, 2022.
8. “Imaging nuclear structure with heavy ion collisions”, Nuclear Theory Seminar, Michigan State University, Nov 1, 2022.
9. “How can we constrain the heavy ion initial condition better?”, India-ALICE-STAR Webinar, Sept 27, 2022.
10. “Imaging the nuclear structure and the initial condition of heavy ion collisions across nuclear chart”, TGSW2022 online seminar, University of Tsukuba, Sept 27 2022.
11. “Opportunities in small systems and connection to nuclear structure”, 2022 NSAC Long-Range Plan Town Hall Meeting on Hot and Cold QCD, MIT, Sept 23-25, 2022.
12. “The isobar collision run at RHIC : a tool for precision studies”, Workshop on Deciphering nuclear phenomenology across energy scales, ESNT, CEA, France Sept 20-23, 2022.
13. “Nuclear structure study using isobar collision data at RHIC”, C2R2 (union of Korean nuclear research centers) online seminar, Sept 1 2022,
14. “Initial condition”, The Berkeley Symposium on Hard Probes and Beyond to celebrate Xinnian Wang’s 60th birthday, Berkeley, LBNL, August 18-19, 2022.

15. “Perspectives on the emergence of collective flow”, Collectivity in heavy ion collisions and cold atom gases, Huzhou University. June 29- July 3, 2022.
16. “Imaging nuclear structure in high-energy heavy-ion collisions,” NBI Heavy-ion Seminar, June 9, 2022
17. “Isobar collisions at RHIC: A tool for precision studies in nuclear physics,” EMMI Rapid Reaction Task Force on Nuclear physics confronts relativistic collisions of isobars, 30 May - 3 June.
18. “Imaging nuclear structure in high-energy heavy-ion collisions”, Frontier of Nuclear physics online seminar, Fudan University, May 18, 2022
19. “Imaging nuclear structure in heavy-ion collisions”, Heavy ion Tea seminar, LBL, Jan 11 2022.
20. “Nuclear shape imaging using hydrodynamics in high-energy heavy-ion collisions”, Zimanyi School 2021, Eotvos University, Budapest, Dec 6-10, 2021.
21. “Connection between nuclear structure and heavy-ion collisions”, BES online seminar III on RHIC beam energy scan: theory and experiment, Dec. 7
22. “Imaging the nuclear structure in high-energy heavy-ion collisions”, Seminar in Hadronic Physics, McGill University. Nov 9, 2021.
23. “New opportunities for nuclear shape imaging in high-energy heavy-ion collisions”, The 8th Asian Triangle Heavy-Ion Conference, ATHIC 2021, Nov 4-9, 2021
24. “Effects of nuclear structure in isobar collisions”, 6th International Conference on Chirality, Vorticity and Magnetic Field in Heavy Ion Collisions, Stony Brook University, November 1-5, 2021.
25. “New opportunities to probe nuclear deformation using high-energy heavy-ion collisions,”, CERN Theory Heavy Ion Coffee, Oct 4, 2021
26. “New opportunities to probe nuclear deformation using high-energy heavy-ion collisions,”, BNL Nuclear Physics Seminar, Sept 28, 2021,
27. “New opportunities to probe nuclear deformation using high-energy heavy-ion collisions,”, International Workshop on Shapes and Dynamics of Atomic Nuclei: Contemporary Aspects, SDANCA-21, Online, 16-18 September 2021, Sofia, Bulgaria
28. “Remarks on the collectivity in heavy-ion collisions”, ALICE Physics Week, 27 Sept-1 Oct, 2021
29. “New opportunities to probe nuclear deformation using high-energy heavy-ion collisions,”, PKU HEP Seminar, Sept 27, 2021.
30. “New opportunities to probe nuclear deformation using high-energy heavy-ion collisions,”, 147th HENPIC seminar, September 9, 2021
31. “Collision system scan and future perspectives with STAR detector,”, Workshop on RHIC Science Programs Informative Toward EIC in the Coming Years, Stony Brook University, NY, USA, online, 24-26 May 2021.



32. “Nuclear deformation effects via Au+Au and U+U collisions from STAR,” Vth International Conference on the Initial Stages of High-Energy Nuclear Collisions, Weizmann Institute of Science, Israel, online 10-15 January 2021
33. “Initial State and Collective flow”, 20th Zimányi school winter workshop on heavy ion physics, December 7-11, 2020, Budapest, Hungary.
34. “Challenges and opportunities in flow studies”, On-line seminar series on “RHIC Beam Energy Scan: Theory and Experiment” series, August 18, 2020
35. “Selected heavy ion results from LHC”, International Workshop on Nuclear Structure and High Energy Nuclear Collisions, 13-17 December 2019, Huzhou, China
36. “Flow and Centrality fluctuations in heavy ion collisions”, Workshop on the QCD Phase Structure at High Baryon Density Region, 12-14 November 2019, Central China Normal University, China.
37. “Centrality fluctuations in heavy ion collisions”, New development of hydrodynamics and its applications in Heavy-Ion Collisions, Oct.30 - Nov.2 2019, Fudan University, China.
38. “Recent results from ATLAS”, 13th workshop in the series of workshops on QCD phase transition and relativistic heavy-ion physics, 16-20 August 2019, China.
39. “Flow and centrality fluctuations in Pb+Pb collisions”, Workshop on Partonic and Hadronic Transport Approaches for Relativistic Heavy Ion Collisions, May 11-12, 2019, Dalian, China
40. “Future opportunities for a small-system scan in STAR”, Workshop on STAR Forward Tracking Detector Upgrade and Related Physics, May 7-8, 2019, Shandong University Qingdao, China.
41. “Recent results from ATLAS”, 5th International Conference on the Initial Stages in High-Energy Nuclear Collisions, 24-28 June 2019, Columbia University, USA.
42. “Future opportunities of collectivity in small systems at RHIC”, Nuclear Physics Seminar, May 12, 2019, BNL, USA.
43. “Future opportunities of collectivity in small systems at RHIC”, INT Program INT-19-1b, Origins of Correlations in High Energy Collisions April 29 - May 24, 2019, University of Washington, USA
44. “Future opportunities of collectivity in small systems at RHIC”, Workshop on collectivity of small systems in high-energy collisions, March 14-16, Rice University, USA 2019.
45. “Long-range collectivity in small collision systems”, Symposium on Twenty Years of RHIC Physics in China, Feb.21-24, Zhongshang University, Guangzhou, China 2019.
46. “Centrality fluctuations in heavy ion collisions”, IOPP Forum, Nov 8, CCNU, Wuhan, China 2018.
47. “Centrality fluctuations in heavy ion collisions”, The 7th Asian Triangle Heavy-Ion Conference (ATHIC 2018), Nov.3–Nov.6, Hefei, China 2018.

48. “Study of strongly-coupled QCD matter with the ATLAS detector at the LHC”, IOPP Forum, June 19, CCNU, Wuhan, China 2018.
49. “Small system physics from ATLAS”, Second international workshop on Collectivity in Small Collision Systems (CSCS2018), June 13-15, Wuhan, China, 2018.
50. “Centrality fluctuations in heavy ion collisions”, Opportunities and Challenges with Jets at LHC and beyond, June 10-12, Wuhan, China, 2018.
51. “Hydro and Flow in nuclear collisions”,, student lecture in Quark Matter 2018 conference, May 13, Venice, Italy, 2018.
52. “Study of strongly-coupled QCD matter with the ATLAS detector at the LHC”, Particle physics seminar, February 12, Stony Brook University, 2018.
53. “Long-range multi-particle collectivity from pp to AA”, 4th International Conference on the Initial Stages in High-Energy Nuclear Collisions, September 18–22, Crakow, Poland, 2017,
54. “Longitudinal dynamics in heavy ion collisions”, Weihai, China, August 1-5, 2017.
55. “Flow fluctuations and longitudinal dynamics”, Workshop on AMPT for Relativistic Heavy Ion Collisions (AMPT2017), July 24-27, Chengdu, China, 2017.
56. “Longitudinal flow dynamics in heavy ion collisions”, The 12th Workshop on QCD Phase Transition and Relativistic Heavy-ion Collisions (QPT2017), July 20-23, Xian, China, 2017.
57. “Long-range collectivity in small systems”,, Workshop on Collectivity in Small Collision Systems, June 12-16, XII Workshop on Particle Correlations and Femtoscopy, NIKF, Netherland, 2017.
58. “Long-range collectivity in small systems”,, Workshop on Collectivity in Small Collision Systems, May 8-10, NBI, Copenhagen, 2017
59. “What is the meaning of collectivity in small systems”, QCD Chirality Workshop Mar 27-30, UCLA, Los Angeles, 2017
60. “Towards Uli’s Little-Bang Standard Model”, ULtra-RelatIvistiCH HEavy IoNZ, July 18-21, CERN, Switzerland, 2016.
61. “The role of longitudinal correlations and fluctuations”, Initial Stages conference, May 23-27, Lisbon, Portugal, 2016.
62. “Some thoughts on the longitudinal correlations”, RBRC workshop on Opportunities for Exploring Longitudinal Dynamics in Heavy Ion Collisions at RHIC, Jan 20-22, 2016, BNL. <http://quark.phy.bnl.gov/kdusling/misc/oeld2016/oeld2016.html>
63. “Longitudinal correlation in heavy-ion collisions”, QCD Chirality Workshop, Feb 23-26,2016, UCLA.
64. “Azimuthal and longitudinal correlations in pp collisions”, Minimum Bias and Underlying Event Working Group, Nov 19, 2015, CERN, Switzerland.

65. “The Chemistry of the Quark-Gluon Plasma - A Primordial Liquid That Existed in the Very Early Universe”, Keynote speech in Chemistry Research Day, Oct 23, 2015, Chemistry Department, Stony Brook University.
66. “What do recent ATLAS measurements tell us about the dynamics and the properties of quark-gluon plasma?”, LHC seminar, Oct 13, 2015, CERN, Switzerland.
67. “What have we learned from event-by-event flow measurement?”, RHIC/AGS User Workshop on Quantifying the Properties of the Perfect Liquid, June 9-12, 2015, BNL, NY.
68. “Meanings of cumulant measurements”, RBRC workshop on Collectivity in Small Colliding Systems with High Multiplicity, March 4-6, 2015, BNL, NY.
69. “Event-by-Event flow harmonics”, QCD Chirality workshop, Jan 21-23, 2015, UCLA.
70. “Correlation between harmonics”, The 2nd International Conference on the Initial Stages in High-Energy Nuclear Collisions, Dec 3-7, 2014; Napa, CA.
71. “Understanding event-shape fluctuations via flow correlations in heavy-ion collisions at LHC”, 4th Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Oct 7-11, 2014; Waikoloa, Hawaii.
72. “Bulk Properties at LHC”, JET Collaboration Summer School, June 19-21, 2014, UC Davis.
73. “Understanding the Event-shape Fluctuations via Flow Correlations in Heavy-ion Collisions at LHC”, The 5th Berkeley School on Collective Dynamics in High Energy Collisions, June 9 - 12, 2014, LBNL.
74. “Hidden secrets of event-shape fluctuations”, ECT workshop on the Hydrodynamics of Strongly Coupled Fluids, May 11-16 2014, ECT, Trento.
75. “the hidden secretes of the event shape fluctuations”, the 30th Winter Workshop On Nuclear Dynamics, 6-13 April 2014, Galveston, Texas
76. “Event by Event flow at LHC and event-shape-selection technique” NFQCD 2013, Dec 4, 2013.
77. “Recent flow results from ATLAS”, 19th HENPIC seminar
78. “Flow measurements from ATLAS”, Nuclear physics seminar at Ohio State university, Columbus, Oct. 17, 2013.
79. “Recent flow results from ATLAS”, Joint high energy/nuclear physics seminar at Rice university, Houston, Oct 1, 2013.
80. “Selected flow measurements from ATLAS”, XLIII International Symposium on Multiparticle Dynamics (ISMD13), 15-20 September 2013, Chicago.
81. “Event by event flow from LHC”, 2nd Workshop on Initial State Fluctuation and Final State Correlations, Aug 11-14, 2013, Chengdu, China.
82. “Recent Heavy ion result from ATLAS”, 10th Workshop on QCD Phase Transition and Relativistic Heavy-ion Physics, Aug 8-10, 2013, Chengdu, China.

83. “Event-by-Event flow from ATLAS”, Rencontres Ions Lourds/Heavy Ion Meeting, IPN Orsay, June 14, 2013
84. “Event-by-Event Flow and Initial Geometry at the LHC”, Twelfth Workshop on Non-Perturbative Quantum Chromodynamics, L’Institute d’Astrophysique de Paris, June 10-13, 2013
85. “ATLAS flow results”, The Heavy ion tea seminar at LBL. Nov 19, 2012.
86. “Flow measurements from ATLAS”, Nuclear physics seminar at Micgill university, Canada, Nov 16, 2012.
87. “Flow overview” Workshop on Jet Modification in the RHIC and LHC Era, Wayne State University, Detroit, Michigan, Aug 20-23, 2012.
88. “ATLAS hadron pair correlations in Pb-Pb collisions”, INT Workshop INT-12-51W The ”Ridge” Correlation in High-Energy Collisions at RHIC and LHC, May 7 - 11, 2012
89. “Probing the hot, dense QCD matter with the ATLAS experiment at the LHC”, Nuclear Physics Seminar, University of Science and Technology of China, July 3, 2012
90. “Harmonic flow from ATLAS”, Nuclear Physics Seminar, Department of Physics and Astronomy, Stony Brook University. Oct. 20, 2011
91. “Harmonic flow measurements from ATLAS” Nuclear Physics Seminar, Department of Physics and Astronomy, Ohio University. Oct. 12, 2011
92. “Heavy ion results from ATLAS”, Joint Meeting of Chinese Physicists Worldwide ( OCPA7 ), August 1-5,2011, Kaohsiung, Taiwan.
93. “Jet quenching and energy loss models at RHIC”, Heavy ion jet quenching workshop, 2011 RHIC & AGS Annual Users’ Meeting, June 20, 2011
94. “sounds of little-bang from ATLAS” Colloquium of Department of Physics and Astronomy, Stony Brook University. Sept. 20, 2011
95. “Recent Heavy Ion Results from RHIC ”, XIX International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2011) April 11-15, 2011, Newport News, VA USA.
96. “Zeroing in on jet quenching”, The 3rd Asian Triangle Heavy ion Conference (ATHIC 2010),Oct 18-20, 2010, Wuhan, China.
97. “High pT  $\pi^0$  azimuthal anisotropy in Au+Au collisions: the influence of initial geometry and implication for the jet quenching” Nuclear Physics Seminar, Oct 5 2010, BNL
98. “High pT  $\pi^0$  azimuthal anisotropy measurement from PHENIX: the influence of initial geometry and implication for the jet quenching”, September 9 2010, Nuclear Physics Seminar, McGill University, Montreal
99. “Prospects for Heavy Ions physics in ATLAS and CMS”, Hadron Collider Physics Symposium 2010, Aug 23-27, 2010, University of Toronto, in Toronto.

100. “The role of initial collision geometry in jet quenching”, INT workshop on Quantifying the Properties of Hot QCD Matter, June 20-25, 2010, University of Washington, Seattle.
101. “Can we make sense of the correlation data at RHIC?”, Workshop on Critical Examination of RHIC Paradigms April 14-17, 2010, University of Texas at Austin, TA
102. “Probe the sQGP via flow, jet quenching and medium response”, The 26th Winter Workshop on Nuclear Dynamics. January 2 - 9, 2010, Sunset Jamaica Grande Resort and Spa, Ocho Rios, Jamaica
103. “Understanding the jet and underlying event from p+p and d+Au collisions at RHIC” Brookhaven National Lab. AGS/RHIC user meeting, June 2, 2009.
104. “Can We Make Sense of the Jet Correlations Results at RHIC?” Brookhaven National Lab. Nuclear Physics Seminar, December 9, 2008.
105. “Understanding jet quenching and medium response at RHIC” Tamura Symposium, UT at Austin, November 20-22, 2008, Taxes.
106. “Jet Correlations”,  
The 236th ACS National Meeting & Exposition August 17-21, 2008. Philadelphia, PA, USA
107. “Probing the Quark Gluon Plasma with Jet Correlations”,  
The international (7th national) workshop for QCD phase transition and heavy ion collisions, Hefei, China, July. 10-13, 2008
108. “ATLAS Heavy Ion Physics Program,”  
International Workshop on Heavy Ion Physics at LHC May 21-24, 2008, Wuhan, China
109. “Probing the Quark Gluon Plasma with jets”,  
The 235th ACS National Meeting, April 6 -10, 2008 New Orleans, LA USA.
110. “A guide through the dihadron correlation landscape”  
Early Time Dynamics in Heavy Ion Collisions, McGill University, Montreal, Quebec, Canada, July 16-19, 2007
111. “Future measurements in jet tomography at RHIC energies”  
Invited talk, Workshop on Future Prospects in QCD at High Energy, BNL, July 17-22, 2006.
112. “Overview of jet results from PHENIX”  
Invited talk, Jet Correlations at RHIC workshop, BNL, March 2005.
113. “Non-identified charged hadron production at  $\sqrt{s_{NN}} = 62.4$  GeV Au+Au collisions”  
contributed talk, APS Division of Nuclear Physics, Fall Meeting, Chicago, IL, Oct. 2004.
114. “A measurement of jet fragmentation through two particle correlation ( $\pi^\pm - h$ ) in d+Au and p+p collision at RHIC”

contributed talk, APS Division of Nuclear Physics, Fall Meeting, Chicago, IL, Oct. 2004.

115. “Jets Absorption in Heavy-Ion Collisions”  
Invited seminar, Apr. 2004, Kent state University, Ohio.
116. “Collision Geometry and High  $p_T$  suppression”  
Invited talk, Feb. 2003, Breckenridge, Colorado, 19th Winter workshop on nuclear dynamics.
117. “New high  $p_T$  results from PHENIX”  
Invited talk, Dec. 2002, Seattle, Washington, INT/RHIC winter workshop.