

Curriculum Vitae: Xianglei Zhu

Personal Data:

Date of Birth: February 3rd, 1979
Place of Birth: Liaoning, China
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Education:

- 2001.8-2007.7, Ph.D, Physics Department, Tsinghua University. Thesis: “Research on the Signatures of Quark-Gluon Plasma Formed in Relativistic Heavy-Ion Collisions”. Advisor: Prof. Pengfei Zhuang
- 2004.9-2006.8, Visiting student in Frankfurt International Graduate School for Science, Frankfurt University, Germany. Advisors: Prof. Marcus Bleicher and Prof. Horst Stöcker
- 1997.8-2001.7, B.S., Physics Department, Tsinghua University

Professional Experience:

- 2022.8-current: Associate Professor (Tenured), Department of Engineering Physics, Tsinghua University
- 2016.8-2022.7: Associate Professor (Tenure Track), Department of Engineering Physics, Tsinghua University
- 2012.12-2016.8: Associate Professor, Department of Engineering Physics, Tsinghua University
- 2009.10-2012.11: Assistant Professor, Department of Engineering Physics, Tsinghua University
- 2009.3-2009.6: Visiting Research Scholar, University of California, Los Angeles

- 2008.2-2008.9: Visiting Research Scholar, Brookhaven National Laboratory and University of California, Los Angeles
- 2007.8-2009.9: Postdoctoral Researcher, Department of Engineering Physics, Tsinghua University

Teaching:

- 2011-2023: “Particle physics” for graduate students
- 2018-2023: “Fundamental physics (I), (II) & (III)” for undergraduate students
- 2015-2017: “General physics (III)” for undergraduate students

Research Fundings:

1. The National Science Fund for Excellent Young Scholars, NSFC (Grant No. 11622539).
2. The National Natural Science Foundation of China (Grant Nos. 1201101483, 11890712, 11161140590, 11035009, 11335005, 10905029).
3. The Foundation of Ministry of Science and Technology of China (Nos. 2020YFE0202001, 2022YFA1604902).
4. The Major State Basic Research Development Program in China (No. 2014CB845400).
5. The Foundation for the Authors of National Excellent Doctoral Dissertation of P.R. China (FANEDD) (No. 201021).

Awards:

- 2016.9, Excellent Young Scholars, NSFC, China
- 2015.2, The Second Prize for Natural Science of the Ministry of Education, China (as the third co-author)
- 2015.1, 221 Supporting Program for Young Talents in Fundamental Research, Tsinghua University
- 2009.7, Awards of National Excellent Doctoral Dissertation of P.R. China, Ministry of Education, China
- 2007.7, Yu-Hsun WOO Prize, Physics Department, Tsinghua University
- 2004.9-2006.9, Scholarship from Frankfurt International Graduate School for Science, Frankfurt University, Germany.

Travel History:

- 2020.1, visit CERN, Geneva, Switzerland
- 2019.8, attend conference at Glasgow, UK
- 2019.6, attend conference at Bari, Italy
- 2017.8, visit Astana, Kazakhstan
- 2017.1, attend workshop at CERN, Geneva, Switzerland
- 2016.11, attend workshop at Chiapas, Mexico
- 2016.5, visit CERN, Geneva, Switzerland
- 2014.11, attend conference in Bielefeld, Germany
- 2014.6, attend workshop in BNL, NY, USA
- 2014.5, attend conference in Darmstadt, Germany
- 2014.2, attend workshop in BNL, NY, USA
- 2014.1, attend workshop in Bhubaneswar, India
- 2013.11, attend workshop in Houston, USA
- 2013.7, attend conference in Birmingham, UK
- 2012.11, attend conference in Pusan, South Korea
- 2012.8, attend conference in Washington D.C., USA
- 2012.3, visit KISTI, Dajeon, South Korea
- 2011.9, attend conference in Krakow, Poland
- 2010.6, visit UCLA, LA, USA
- 2010.3, visit BNL, NY, USA
- 2009.9, participate in experiment at GSI, Darmstadt, Germany
- 2009.4, participate in experiment at GSI, Darmstadt, Germany
- 2009.3-2009.6, visiting research scholar at UCLA, USA
- 2008.2-2008.9, visiting research scholar at BNL and UCLA, USA
- 2004.9-2006.9, visiting student at Frankfurt, Germany

- 2006.7, visiting student at Nantes, France
- 2006.4, tour in Switzerland
- 2005.8, attend an international conference at Budapest, Hungary

Representative Publications (as Principal Authors):

1. **“Observation of sequential Υ suppression in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV with the STAR experiment,”**
B. Aboona *et al.* [STAR Collaboration].
arXiv:2207.06568 [nucl-ex]
DOI:10.1103/PhysRevLett.130.112301
Phys. Rev. Lett. **130**, 112301 (2023)
2. **“Flow and interferometry results from Au+Au collisions at $\sqrt{s_{NN}} = 4.5$ GeV”**
J. Adam *et al.* [STAR Collaboration].
arXiv:2007.14005 [nucl-ex]
DOI:10.1103/PhysRevC.103.034908
Phys. Rev. C **103**, 034908 (2021)
3. **“Measurement of J/ψ production cross-sections in pp collisions at $\sqrt{s} = 5$ TeV”**
R. Aaij *et al.* [LHCb Collaboration].
arXiv:2109.00220 [nucl-ex]
DOI:10.1007/JHEP11(2021)181
JHEP **11**, 181 (2021)
4. **“Strange hadron production in Au+Au collisions at $\sqrt{s_{NN}} = 7.7, 11.5, 19.6, 27,$ and 39 GeV”**
J. Adam *et al.* [STAR Collaboration].
arXiv:1906.03732 [nucl-ex]
DOI:10.1103/PhysRevC.102.034909
Phys. Rev. C **102**, 034909 (2020)
5. **“Prompt Λ_c^+ production in p Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV”**
R. Aaij *et al.* [LHCb Collaboration].
arXiv:1809.01404 [hep-ex]
DOI:10.1007/JHEP02(2019)102
JHEP **1902**, 102 (2019)
6. **“Bulk Properties of the Medium Produced in Relativistic Heavy-Ion Collisions from the Beam Energy Scan Program”**
L. Adamczyk *et al.* [STAR Collaboration].
arXiv:1701.07065 [nucl-ex]
DOI:10.1103/PhysRevC.96.044904
Phys. Rev. C **96**, 044904 (2017)

7. **“Probing parton dynamics of QCD matter with Ω and ϕ production”**
 L. Adamczyk *et al.* [STAR Collaboration].
 arXiv:1506.07605 [nucl-ex]
 DOI:10.1103/PhysRevC.93.021903
 Phys. Rev. C **93**, 021903(R) (2016)
8. **“Observation of an energy-dependent difference in elliptic flow between particles and anti-particles in relativistic heavy ion collisions”**
 L. Adamczyk *et al.* [STAR Collaboration].
 arXiv:1301.2347 [nucl-ex]
 10.1103/PhysRevLett.110.142301
 Phys. Rev. Lett. **110**, 142301 (2013)
9. **“Strangeness Enhancement in Cu+Cu and Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV”**
 G. Agakishiev *et al.* [STAR Collaboration].
 arXiv:1107.2955 [nucl-ex]
 10.1103/PhysRevLett.108.072301
 Phys. Rev. Lett. **108**, 072301 (2012)
10. **“The Effect of partonic wind on charm quark correlations in high-energy nuclear collisions”**
 X. Zhu, N. Xu and P. Zhuang.
 arXiv:0709.0157 [nucl-th]
 10.1103/PhysRevLett.100.152301
 Phys. Rev. Lett. **100**, 152301 (2008)

Conference Talks:

1. “Strangeness production in RHIC beam energy scan”, Chinese Physical Society 2020/2021 Autumn Meeting, 2021.10.21–24, Lanzhou, Online.
2. “Recent heavy-ion results from STAR”, the 14th workshop in the series of workshops on QCD phase transition and relativistic heavy-ion physics, 2021.7.26–30, Guiyang, China.
3. “Recent strangeness results from the RHIC beam energy scan”, the 9th International Conference on New Frontiers in Physics (ICNFP2020), Sep. 4–12, 2020, Crete, Greece.
4. “Recent strangeness results from the RHIC”, the 27th International Nuclear Physics Conference (INPC 2019), Jul. 29–Aug. 2, 2019, Glasgow, UK.
5. “Strangeness and LF at intermediate baryon density (RHIC BES + SPS)”, the 18th International Conference on Strangeness in Quark Matter (SQM2019), Jun. 10–15, 2019, Bari, Italy.

6. “Hadron production at LHCb”, the 4th China LHC Physics Workshop (CLHCP2018), Dec. 19–22, 2018, Wuhan, China.
7. “Small system physics from LHCb”, the 2nd International Workshop on Collectivity in Small Collision Systems (CSCS2018), Jun. 13–15, 2018, Wuhan, China.
8. “Strangeness production in high energy nuclear collisions at RHIC”, the 17th conference of intermediate-to-high energy nuclear physics in China, May 5–9, Yichang, China.
9. “Soft Probes and Fluctuations in LHCb”, Workshop on LHCb Heavy Ion and Fixed Target Physics, Jan 9–10, 2017, CERN.
10. “Long-range near-side angular correlations in the forward region in p+Pb collisions at $\sqrt{s_{NN}} = 5$ TeV with LHCb”, the 8th International Workshop on Multiple Partonic Interactions at the LHC, Nov. 28–Dec. 2, 2016, Chiapas, Mexico.
11. “ D^0 meson production in pPb and PbPb collisions at $\sqrt{s_{NN}} = 5$ TeV with LHCb”, Hard Probes 2016, Sep. 23–27, 2016, Wuhan, China.
12. “Strangeness production in STAR beam energy scan”, Critical Point and Onset of Deconfinement (CPOD) 2014, Nov. 11–17, 2014, Bielefeld, Germany.
13. “ Ω production in p+p, Au+Au and U+U collisions in STAR”, Quark Matter 2014, May 19–24, 2014, Darmstadt, Germany.
14. “Bulk measurement at RHIC”, Future Trends in High-Energy Nuclear Collisions, Aug. 19–22, 2013, Beijing, China.
15. “Recent results on strangeness production at STAR”, Strangeness in Quark Matter (SQM) 2013, Jul. 22–27, 2013, Birmingham, UK.
16. “High p_T hadron suppression and jet v_2 from STAR”, the 8th workshop on high p_T physics at LHC, Oct. 21–24, 2012, Wuhan, China.
17. “Strangeness production in heavy ion collisions from STAR beam energy scan”, 4th Asian Triangle Heavy Ion Conference (ATHIC) 2012, Nov. 14–17, 2012, Pusan, South Korea.
18. “Measurements of Strange Hadrons K_S^0 , Λ and Ξ from Au+Au Collisions at $\sqrt{s_{NN}} = 7.7$, 11.5 and 39 GeV in STAR”, Critical Point and Onset of Deconfinement (CPOD) 2011, Nov. 7–11, 2011, Wuhan, China.
19. “Measurements of Strange Hadrons K_S^0 , Λ and Ξ from Au+Au Collisions at $\sqrt{s_{NN}} = 7.7$, 11.5 and 39 GeV in STAR”, Strangeness in Quark Matter (SQM) 2011, Sep. 18–24, 2011, Cracow, Poland.
20. “Strangeness production in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV and prospects for beam energy scan in STAR”, 3rd Asian Triangle Heavy Ion Conference (ATHIC) 2010, Oct. 18–20, 2010, Wuhan, China.

21. “Strangeness production and Cronin effect in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV in STAR”, Quark Matter 2009, Mar. 30 – Apr. 4, 2009, Knoxville, US.
22. “Beam test results of high rate MRPC at GSI”, 10th international conference on nucleus-nucleus collisions (NN2009), Aug. 16–21, 2009, Beijing, China.
23. “The effect of ‘partonic wind’ in nuclear collisions on charm quark correlations”, Strangeness in Quark Matter 2008, Oct. 6–10, 2008, Beijing, China.

Full List of the STAR Collaboration Publications (as one of the authors)

<https://inspirehep.net/search?p=find+a+X.+Zhu+and+cn+STAR>

Full List of the LHCb Collaboration Publications (as one of the authors)

<https://inspirehep.net/search?p=find+a+X.+Zhu+and+cn+LHCb>