

- CONTACT INFORMATION 322 Building 7, UCAS Zhongguancun Campus,
Kavli Institute for Theoretical Sciences, University of Chinese
Academy of Sciences.
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<http://inspirehep.net/author/profile/X.Zhou.15>
- EMPLOYMENT
- 2018-2021: PCTS Postdoctoral Fellow, Sam B. Treiman Fellow at *Princeton Center for Theoretical Science, Princeton University*.
 - 2021-now: Assistant Professor at *Kavli Institute for Theoretical Sciences, University of Chinese Academy of Sciences*.
- EDUCATION
- *C. N. Yang Institute for Theoretical Physics, Stony Brook University*, Ph.D. in Physics, 2018.
Advisor: Leonardo Rastelli.
 - *University of Science and Technology of China*, B.Sc. in Physics, 2013.
- RESEARCH INTERESTS
- Quantum Field Theory and String Theory.
 - The Nonperturbative Bootstrap for Conformal Field Theories.
 - The AdS/CFT Correspondence.
 - The Anti de Sitter Space Scattering Amplitude Program.
- REFEREE
- Journal of High Energy Physics (JHEP), Nuclear Physics B, European Physical Journal C
- PUBLICATIONS
1. L. Rastelli, X. Zhou, “*Mellin Amplitudes for Supergravity on $AdS_5 \times S^5$* ”, **Phys.Rev.Lett.** 118 no. 9, (2017) 091602. arXiv:1608.06624 [hep-th].
 2. Z. Komargodski, A. Sharon, R. Thorngren, X. Zhou, “*Comments on Abelian Higgs Models and Persistent Order*”, **SciPost Physics** 6 (2019) no.1, 003, arXiv:1705.04786 [hep-th].

3. L. Rastelli, X. Zhou, “*The Mellin Formalism for Boundary CFT_d*”, **JHEP** 10 (2017) 146, arXiv:1705.05362 [hep-th]
4. L. Rastelli, X. Zhou, “*How to Succeed at Holographic Correlators without Really Trying*”, **JHEP** 04 (2018) 014, arXiv:1710.05923 [hep-th].
5. L. Rastelli, X. Zhou, “*Holographic Four-Point Functions in the (2, 0) Theory*”, **JHEP** 06 (2018) 087, arXiv:1712.02788 [hep-th].
6. X. Zhou, “*On Superconformal Four-Point Mellin Amplitudes in Dimension $d > 2$* ”, **JHEP** 08 (2018) 187, arXiv:1712.02800 [hep-th].
7. X. Zhou, “*On Mellin Amplitudes in SCFTs with Eight Supersymmetries*”, **JHEP** 07 (2018) 147, arXiv:1804.02397 [hep-th].
8. X. Zhou, “*Recursion Relations in Witten Diagrams and Conformal Partial Waves*”, **JHEP** 05 (2019) 006, arXiv:1812.01006 [hep-th].
9. D. Mazac, L. Rastelli, X. Zhou, “*An Analytic Approach to BCFT_d*”, **JHEP** 12 (2019) 004, arXiv:1812.09314 [hep-th].
10. L. Rastelli, K. Roumpedakis, X. Zhou, “*AdS₃ × S³ Tree-Level Correlators: Hidden Six-Dimensional Conformal Symmetry*”, **JHEP** 10 (2019) 140, arXiv:1905.11983 [hep-th].
11. V. Goncalves, R. Pereira, X. Zhou, “*20' Five-Point Function from AdS₅ × S⁵ Supergravity*”, **JHEP** 10 (2019) 247, arXiv:1906.05305 [hep-th].
12. D. Mazac, L. Rastelli, X. Zhou, “*A Basis of Analytic Functionals for CFTs in General Dimension*”, **JHEP** 08 (2021) 140, arXiv:1910.12855 [hep-th].
13. L. F. Alday, X. Zhou, “*Simplicity of AdS Supergravity at One Loop*”, **JHEP** 09 (2020) 008, arXiv:1912.02663 [hep-th].

14. N. Drukker, S. Giombi, A. A. Tseytlin, X. Zhou, “*Defect CFT in the 6d (2,0) theory from M2 brane dynamics in $AdS_7 \times S^4$* ”, **JHEP** 07 (2020) 101, arXiv:2004.04562 [hep-th].
15. X. Zhou, “*How to Succeed at Witten Diagram Recursions without Really Trying*”, arXiv:2005.03031 [hep-th], **JHEP** 08 (2020) 077.
16. L. F. Alday, X. Zhou, “*All Tree-Level Correlators for M-theory on $AdS_7 \times S^4$* ”, **Phys.Rev.Lett.** 125 no. 13, (2020) 131604. arXiv:2006.06653 [hep-th].
17. L. F. Alday, X. Zhou, “*All Holographic Four-Point Functions in All Maximally Supersymmetric CFTs*”, **Phys.Rev.X** 11 (2021) 1, 011056, arXiv:2006.12505 [hep-th].
18. S. Giombi, H. Khanchandani, X. Zhou, “*Aspects of CFTs on Real Projective Space*”, **J.Phys.A** 54 (2021) 2, 024003, arXiv:2009.03290 [hep-th].
19. C. Behan, P. Ferrero, X. Zhou, “*More on holographic correlators: Twisted and dimensionally reduced structures*”, **JHEP** 04 (2021) 008, arXiv:2101.04114 [hep-th].
20. L. F. Alday, C. Behan, P. Ferrero, X. Zhou, “*Gluon Scattering in AdS from CFT*”, **JHEP** 06 (2021) 020, arXiv:2103.15830 [hep-th].
21. X. Zhou, “*Double Copy Relation in AdS Space*”, **Phys.Rev.Lett** 127 no. 14, (2021) 141601, arXiv:2106.07651 [hep-th].

INVITED TALKS Conferences

1. “Holographic four-point functions made easy: general results for 1/2 BPS operators from Mellin amplitude” @ Galileo Galilei Institute, Florence, *Conformal Field Theories and Renormalization Group Flows in Dimensions $d > 2$ (Bootstrap 2016)*, June, 2016.
2. “Mellin amplitudes for supergravity on $AdS_5 \times S^5$ ” @ ICTP-SAIFR, São Paulo, *Bootstrap 2017*, May, 2017.

3. “New Results in Conformal Field Theories” @ Simons Center for Geometry and Physics, *Continuum and Lattice Approaches to the Infrared Behavior of Conformal and Quasi-Conformal Gauge Theories*, January, 2018.
4. Holographic Mellin Amplitudes in Various Dimensions @ Trinity College Dublin, *Workshop on higher-point correlation functions and integrable AdS/CFT*, April, 2018.
5. Polyakov blocks and functionals for BCFT_d @ Caltech, *Bootstrap 2018*, July, 2018.
6. Hidden symmetries at strong coupling @ International Institute of Physics, Natal Brazil, *Nonperturbative Methods for Conformal Theories*, April, 2019.
7. Hidden conformal symmetries in holographic correlators @ Pollica Italy, *Pollica Summer Workshop: Mathematical and Geometric Tools for Conformal Field Theories*, June, 2019.
8. Five-Point Functions of $\mathcal{N} = 4$ SYM from IIB Supergravity @ CERN, *Exact computations in AdS/CFT*, August, 2019.
9. A Basis of Analytic Functionals for CFTs in General Dimension @ Purdue University, *Strings and Particles at (Purdue) Ohio, Cincinnati, Kentucky*, November, 2019.
10. “All holographic four-point correlators in maximally supersymmetric CFTs” (over Zoom) @ Fudan University, *Fields, Gravity, and Information*, November, 2020.

Seminars

1. “Mellin amplitudes for $AdS_5 \times S^5$ ” @ Brown University, *Brown HET seminar*, October, 2016.
2. “Holographic Mellin Amplitudes” @ Caltech, *High Energy Theory Seminar*, December, 2017.

3. “Modern Methods for Computing Holographic Correlators” @ Simons Center for Geometry and Physics, *SCGP Weekly Meetings*, December, 2017.
4. “Holographic Mellin Amplitudes” @ Zhejiang University, *High Energy Theory Seminar*, January, 2018.
5. “Holographic Mellin Amplitudes” @ University of Michigan, *HET Brown Bag Seminars*, March, 2018.
6. “Superconformal Mellin Amplitudes in Different Dimensions” @ Boston University, *HET Seminars*, April, 2018.
7. “An analytic bootstrap approach to boundary CFT_d” @ Fudan University, *HET Seminars*, December, 2018.
8. “ $AdS_3 \times S^3 \times K3$ four-point functions and hidden symmetry” @ Princeton University, *HET Seminars*, March, 2019.
9. “Towards a scattering amplitude program in $AdS_5 \times S^5$ ” @ New York University, *HET Seminars*, September, 2019.
10. “A Basis of Analytic Functionals for CFTs in General Dimension” @ Zhejiang University, *HET Seminars*, December, 2019.
11. “An Analytic Approach to CFTs in General Spacetime Dimension” @ Kavli Institute for Theoretical Sciences, University of Chinese Academy of Sciences, *HET Seminars*, December, 2019.
12. “An Analytic Approach to CFTs in General Spacetime Dimension” @ Peking University, *HET Seminars*, December, 2019.
13. “A Basis of Analytic Functionals for CFTs in General Dimension” @ Tsinghua University, *HET Seminars*, December, 2019.
14. “All holographic four-point correlators in maximally supersymmetric CFTs” (over Zoom), *Bootstrap Collaboration Seminar Series*, July, 2020.

15. “The scattering amplitude program in AdS: all tree-level 4-pt functions in maximally susy theories” (over Zoom) @ Kavli Institute for Theoretical Sciences, University of Chinese Academy of Sciences, *KITS Online Seminar Series*, August, 2020.
16. “All holographic four-point correlators in maximally supersymmetric CFTs” (over Zoom) @ SLAC, *High energy Seminar*, September, 2020.
17. “All holographic four-point correlators in maximally supersymmetric CFTs” (over Zoom) @ ETH Zürich, *Strings, CFT & Integrability Seminar Series*, December, 2020.
18. “Analytic bootstrap approaches for CFTs on \mathbb{RP}^d and with boundaries” (over Zoom) @ CMSA, Harvard University, *Quantum Matter in Mathematics and Physics Seminar*, December, 2020.
19. “Holographic correlators and emergent Parisi-Sourlas supersymmetry” (over Zoom) @ Center for Joint Quantum Studies, Tianjin University, *Seminar Series*, December, 2020.
20. “Holographic correlators and emergent Parisi-Sourlas supersymmetry” (over Zoom) @ University of Southampton, *String Theory Seminars*, January, 2021.
21. “Holographic correlators and emergent Parisi-Sourlas supersymmetry” (over Zoom) @ ITMP, Lomonosov Moscow State University, *ITMP Seminars*, February, 2021.
22. “Gluon Scattering in AdS from CFT” (over Zoom) @ Oxford University, *Amplitude Workshop*, May, 2021.
23. “Gluon Scattering in AdS from CFT” (over Zoom) @ King’s College London, *High Energy Seminars*, May, 2021.
24. “Gluon Scattering in AdS from CFT” (over Zoom) @ Kavli Institute for Theoretical Sciences, University of Chinese Academy of Sciences, *High Energy Seminars*, May, 2021.

25. “Gluon and Graviton Scattering in AdS from CFT” (over Zoom)
@ Institutes for Advanced Studies, *Informal Meetings on the S-matrix theory*, May, 2021.

26. “Gluon and Graviton Scattering in AdS from CFT” (over Zoom)
@ Durham University, *High Energy Seminars*, May, 2021.

27. “Gluon and Graviton Scattering in AdS from CFT” (over Zoom)
@ Tel Aviv University, *High Energy Seminars*, June, 2021.

Lectures

1. “Two lectures on holographic correlators: how to succeed without really trying” @ Fudan University, December, 2018.

2. “Introduction to the Scattering Amplitude Program in Anti de Sitter Space” @ Kavli Institute for Theoretical Sciences, University of Chinese Academy of Sciences, December, 2019.