Lingfu Zhang

CONTACT INFORMATION	Princeton University Fine Hall 410, Washington Road Princeton, NJ 08544-1000 USA	(609)759-1032 lingfuz@princeton.edu http://lfzhang.com

EDUCATION

Princeton University

Ph.D. candidate, Mathematics, expected Jun 2022.
Advisor: Professor Allan Sly

Massachusetts Institute of Technology

B.S. in Mathematics and in Computer Science and Engineering,
Sep 2014 - Jun 2017.

Tsinghua University

Major in Architecture, incomplete,
Sep 2013 - Jun 2014.

JOURNAL PUBLICATIONS

Danny Nam, Allan Sly, Lingfu Zhang, *The Ising model on trees and factor of IID*,
Comm. Math. Phys. accepted.

Sourav Chatterjee, Persi Diaconis, Alan Sly, Lingfu Zhang, *A phase transition for repeated averages,*
Ann. Probab. accepted.

Linjun Li, Lingfu Zhang, *Anderson-Bernoulli localization on the 3D lattice and discrete unique continuation principle,*
Duke Math. J. accepted.

Riddhipratim Basu, Shirshendu Ganguly, Lingfu Zhang, *Temporal correlation in Last Passage Percolation with flat initial condition via Brownian comparison,*
Comm. Math. Phys. 383, 1805-1888 (2021).

Lingfu Zhang, *Optimal estimates for coalescence of finite geodesics in exponential Last Passage Percolation,*
Electron. Commun. Probab. 25 (2020), paper no. 74, 14 pp.

Vadim Gorin, Lingfu Zhang, *Interlacing adjacent levels of β-Jacobi corners processes,*
Probab. Theory Relat. Fields 172, no. 3-4 (2018): 915-981.

PREPRINTS

Sourav Sarkar, Allan Sly, Lingfu Zhang, *Infinite order phase transition in the slow bond TASEP.*
arxiv:2109.04563, submitted.

Lingfu Zhang, *Shift-Invariance of the colored TASEP and finishing times of the Oriented Swap Process,*
arxiv:2107.06350, submitted.

James B. Martin, Allan Sly, Lingfu Zhang, *Convergence of the environment seen from geodesics in exponential Last Passage Percolation,*
arxiv:2106.05242, submitted.

Jonathan Hermon, Shuangping Li, Dong Yao, Lingfu Zhang, *Mean field behavior during the Big Bang for Coalescing Random Walk,*
arXiv:2105.11585. Ann. Probab. revision requested.

Duncan Dauvergne, Lingfu Zhang, *Disjoint optimizers and the directed landscape,*
arxiv:2102.00954, submitted.

Allan Sly, Lingfu Zhang, *Stationary distributions for the Voter Model in $d \geq 3$ are factors of IID,*
arXiv:1908.09450. Ann. Probab. revision requested.

Hong Wang, Lingfu Zhang, *Refinements of the 2-dimensional Strichartz estimate on the maximum wave packet,*
arxiv:1611.10275.

UPCOMING WORKS	Shirshendu Ganguly, Lingfu Zhang, *Fractal geometry of the space-time difference profile in the directed landscape via construction of geodesic local times.*

Shirshendu Ganguly, Lingfu Zhang, *Convergence of the geodesic local time in Last Passage Percolation.*

HONORS AND AWARDS

Apr	2017	Centennial Fellowship, Princeton University.
Aug	2016	The Hartley Rogers Jr. Prize, MIT.
Apr	2015	Putnam Fellow, the 75th William Lowell Putnam Math Competition.
Aug	2013	Gold Medal, the 54th International Mathematical Olympiad (IMO).

INVITED TALKS

University of Pennsylvania (Philadelphia, PA): Penn/Temple Probability Seminar. Feb 22, 2022.

[Online] Stanford University: Probability Seminar. Jan 10, 2022.

MIT (Cambridge, MA): Probability Seminar. Nov 29, 2021.

[Online] University of Utah: Stochastics Seminar. Nov 19, 2021.

[Online] KTH Royal Institute of Technology: Random Matrix Seminar. Nov 16, 2021.

University of Wisconsin-Madison (Madison, WI): Probability Seminar. Nov 11, 2021.

[Online] Columbia University/NYU Courant: Probability and the City Seminar. Oct 29, 2021.

[Online] Columbia-Princeton Probability Day. May 7, 2021.

[Online] University of California, San Diego: Group Actions Seminar. May 4, 2021.

[Online] University of California, Berkeley: Probability Seminar. Apr 21, 2021.

[Online] ETH Zurich/University of Geneva/Cambridge University: Percolation Today Webinar. Feb 16, 2021.

[Online] Junior Integrable Probability Seminar. Dec 17, 2020.

[Online] The University of British Columbia: Integrable probability mini-workshop, Online Open Probability School. Jun 12, 2020.

[Online] University of Kansas: Probability and Statistics Seminar. Apr 29, 2020.

(Postponed due to Covid-19) Heilbronn Institute for Mathematical Research, University of Bristol, UK: New challenges in the KPZ universality class. Jul 2020.

(Postponed due to Covid-19) University of Wisconsin-Madison: Integrable Probability FRG. Apr 2020.

Stanford University (Stanford, CA): Applied Math Seminar. Dec 4, 2019.

Duke University (Durham, NC): Probability Seminar. Oct 24, 2019.

ICTS, Tata Institute of Fundamental Research (Bangalore, India): Universality in random structures: Interfaces, Matrices, Sandpiles. Jan 25, 2019.

MIT (Cambridge, MA): Integrable Probability Working Group. Nov 29, 2016.

CONTRIBUTED TALKS	[Online] Columbia University: 19th Northeast Probability Seminar. Nov 20, 2020.
	Princeton University: Graduate Student Seminar. Nov 9, 2017.
	MIT (Cambridge, MA): Summer Program for Undergraduate Research Conference. Aug 5, 2016.
SERVICE	Reviewer for: Ann. Probab., Electron. Commun. Probab., Probab. Theory Relat. Fields, Comm. Math. Phys., Probab. Math. Phys., Ann. Appl. Probab.

TEACHING		
	Fall 2021	MAT 215 Single Variable Analysis with an Introduction to Proofs, Preceptor.
	Spring 2021	MAT 385 Probability Theory, Assistant Instructor.
	Fall 2020	MAT 104 Calculus II, Preceptor.
	Spring 2020	MAT 385 Probability Theory, Assistant Instructor.
	Fall 2019	MAT 216 Accelerated Honors Analysis I, Assistant Instructor.
	Spring 2019	MAT 375 Introduction to Graph Theory, Assistant Instructor.
	Fall 2018	MAT 204 Advanced Linear Algebra with Applications, Assistant Instructor.