## 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 2022.

Advisor: Professor Allan Sly

## Massachusetts Institute of Technology

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

## Tsinghua University

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

ACCEPTED ARTICLES 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  $\beta$ -Jacobi corners processes, Probab. Theory Relat. Fields 172, no. 3-4 (2018): 915-981.

Preprints

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, submitted.

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

Danny Nam, Allan Sly, Lingfu Zhang, The Ising model on trees and factor of IID, arxiv:2012.09484, submitted.

Allan Sly, Lingfu Zhang, Stationary distributions for the Voter Model in  $d \geq 3$  are

factors of IID,

arxiv:1908.09450, submitted.

Hong Wang, Lingfu Zhang, Refinements of the 2-dimensional Strichartz estimate on the maximum wave packet,

arxiv:1611.10275.

IN PREPARATION

Sourav Sarkar and Allan Sly and Lingfu Zhang, Infinite order phase transition in the slow bond TASEP.

INVITED TALKS

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

[Online] UC San Diego: Group Actions Seminar. May 4, 2021.

[Online] UC 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.

 $\operatorname{MIT}$  (Cambridge, MA): Summer Program for Undergraduate Research Conference. Aug 5, 2016.

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).

SERVICE Reviewer for: Ann. Probab., Electron. Commun. Probab., Probab. Theory Relat.

Fields, Comm. Math. Phys., Probab. Math. Phys.

TEACHING 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.