Yier Lin

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Education

Ph.D. in mathematics, Columbia University; Advisor: Ivan Corwin 2016-present

B.S. in mathematics, Tsinghua University 2012-2016

Research Interest

Probability theory and Mathematical Physics, Stochastic PDE, Vertex model

Publications

1. Short time large deviations of the KPZ equation (with Li-Cheng Tsai), 2020, *arXiv:2009.10787*

2. Lyapunov exponents of the half-line SHE, 2020, *arXiv:2007.10212*

3. Lyapunov exponents of the SHE for general initial data (with Promit Ghosal), 2020, *arxiv:2007.06505*

4. The stochastic telegraph equation limit of the stochastic higher spin six vertex model. *Electronic Journal of Probability (2020), Vol 25, no. 138, 1-30*

5. KPZ equation limit of stochastic higher spin six vertex model. *Mathematical Physics, Analysis and Geometry* (2020), Vol 23, no. 1, 1-118

6. Markov duality for stochastic six vertex model. *Electronic Communications in Probability (2019), Vol 24, no. 67, 1-17*

7. Second order behavior of the block counting process of beta coalescents (with Bastien Mallein). *Electronic Communications in Probability (2017), Vol 22, no. 61, 1-8*

Talks

Contributed talk, 19th Northeast Probability Seminar	Nov 2020
Invited talk, Utah Stochastic Seminar (joint with the University of Arizona)	Nov 2020
Invited talk, Columbia SPDE seminar	Oct 2020
Invited talk, Seminar from a Safe Distance (MIT)	Oct 2020
Invited talk, Purdue probability seminar	Sep 2020
Contributed talk, Bernoulli-IMS One World Symposium	Aug 2020
Invited talk, Junior integrable probability seminar	Aug 2020
Invited talk, Tsinghua University probability seminar	Jan 2020
Invited talk, NYC Integrable Probability working group	Oct 2019
Invited talk, Virginia Integrable Probability Summer School	May 2019

Teaching Experience

Instructor for College Algebra-Analytic Geometry	2020 Spring
TA for Intro Modern Analysis I	2018, 2019 Fall
TA for Topics in Stochastic Analysis	2019 Spring
TA for Analysis and Optimization	2017 Fall, 2019 Spring
TA for Analysis Probability I	2018 Fall
TA for Probability Theory	2018 Spring
TA for Stochastic methods in Finance	2017 Fall

Miscellaneous

Selected Awards

Summer Minerva research fellowship 2018-present

GSAS Dean's fellowship 2016-present

Excellent graduate of Tsinghua University (top 1%) 2016 Jun

Visiting

École normale supérieure, visiting student, mentored by Bastien Mallein 2016 Jan - 2016 Jun

UCLA, Visiting student, mentored by Thomas Liggett 2015-Jul - 2015-Sep

Melbourne University Science Summer Camp 2014 Jul

Academic service

Referee for *Annales de l'Institut Henri Poincaré, Communications in Mathematical Physics, Electronic Communication in Probability, Journal of Functional Analysis, Probability Theory and Related Fields.*

Skills

Language: English (fluent), Mandarin (native), Japanese (intermediate), French (elementary)

Coding: Python, C++, Matlab, Mathematica.