Curriculum Vitae

Shangjie Yang
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Positions

- March 2024— Present — Universidade de São Paulo
  Postdoc — Host: Leonardo Rolla
- February 2022 — February 2024 — Bar-Ilan University
  Postdoc — Host: Gidi Amir and Naomi Feldheim
- November 2021 — February 2022 — Universidade Federal de Bahia
  Postdoc (online) — Host: Tertuliano Franco
- July 2021 — October 2021 — Bar-Ilan University
  Postdoc (online) — Host: Gidi Amir

Education

- March 2017 — April 2021 — Instituto de Matemática Pura e Aplicada
  Ph.D. student — Adviser: Hubert Lacoin
- March 2015 — February 2017 — Instituto de Matemática Pura e Aplicada
  Master student — Adviser: Vladas Sidoravicius
- September 2013 — December 2014 — Nankai University
  Master student (dropout) — Adviser: Kainan Xiang
- September 2009 — June 2013 — Sun Yat-sen University
  Undergraduate student

Research interest

My research focuses on the intersection between probability theory and statistical mechanics: Markov chains and mixing times, random polymer models, interacting particle systems, random walks in random environments, Gaussian random functions.

Publications and preprints

5. **N. Feldheim and S. Yang,** Typical height of the (2+1)-D Solid-on-Solid surface with pinning above a wall in the delocalized phase   Arxiv: 2301.09197
   Stochastic Processes and their Applications. 165 (2023), Pages 168-182.
4. **G. Amir and S.Yang,** The branching number of intermediate growth trees
   Arxiv: 2205.14238   submitted.
3. **H. Lacoin and S.Yang,** Mixing time of the asymmetric simple exclusion process in a random environment   Arxiv: 2102.02606
   Ann. Appl. Probab. 34(1A): 388-427 (February 2024).
2. **H. Lacoin and S.Yang,** Metastability for expanding bubbles on a sticky substrate
   Arxiv: 2007.07832   Ann. Appl. Probab. 32(5): 3408-3449 (October 2022).
1. **S. Yang,** Cutoff for polymer pinning dynamics in the repulsive phase
   Arxiv: 1909.04635   Ann. Inst. H. Poincaré Probab. Statist. 57(3): 1306-1335 (2021).

Teaching assistants at Instituto de Matemática Pura e Aplicada

1. Probability 1 (03/2018 — 06/2018)
2. Stochastic process (the second half) (10/2019 — 11/2019)
   (The first half was given by Leandro Chiarini, 8/2019 — 9/2019)
3. Markov chains and mixing times (01/2020 — 02/2020)

Teaching in Universidade Federal da Bahia

1. Minicourse: mixing time for interface models and particle system (11/2021 — 01/2022)

Talks

- Universidade de São Paulo   *April 2024*
  Talk: Mixing Time of ASEP in a random environment
- Conference: Probability and Statistical Physics   *Jan 2024*
  Talk: Mixing Time of ASEP in a random environment
- Beijing Normal University   *Jan 2024*
  Talk: Metastability for expanding bubbles on a sticky substrate
- Harbin Institute of Technology   *Dec 2023*
  Talk: Metastability for expanding bubbles on a sticky substrate
- Southern University of Science and Technology (SUSTech)   *Nov 2023*
  Talk: Metastability for expanding bubbles on a sticky substrate
- Sichuan University   *Nov 2023*
  Talk: Cutoff for polymer pinning dynamics in the repulsive phase
- Academy of mathematics and system science   *Nov 2023*
  Talk: Cutoff for polymer pinning dynamics in the repulsive phase
- Nankai University   *Nov 2023*
  Talk: Cutoff for polymer pinning dynamics in the repulsive phase
- Tsinghua University   *Nov 2023*
  Talk: Cutoff for polymer pinning dynamics in the repulsive phase
- Harbin Institute of Technology   *Oct 2023*
  Talk: Cutoff for polymer pinning dynamics in the repulsive phase
- Weizmann: Students Probability Day IX   *May 2023*
  Short talk: Typical height of the (2+1)-D Solid-on-Solid surface with pinning above a wall
  in the delocalized phase
- Bar-Ilan University   *March 2023*
  Talk: Typical height of the (2+1)-D Solid-on-Solid surface with pinning above a wall in
  the delocalized phase
- Technion   *March 2023*
  Talk: Typical height of the (2+1)-D Solid-on-Solid surface with pinning above a wall in
  the delocalized phase
- Bar-Ilan University   *Dec 2022*
  Talk: The branching number of intermediate growth trees
- Tsinghua U.-Peking U.-BKU Webminar   *Sep 2022*
  Talk: Mixing time of ASEP in a random environment
- Sichuan University   *May 2022*
  Talk: mixing time for interface models and particle system
- Xiangtan University   *May 2022*
  Talk: mixing time for interface models and particle system
- Bar-Ilan University   *March 2022*
  Talk: mixing time for interface models and particle system
- Oberwolfach workshop   *November 2021*
  Short talk: mixing time for ASEP in random environment
- Ningbo University   *March 2021*
  Talk: metastability for expanding bubbles on a sticky substrate
- Xiangtan University   *November 2020*
  Talk: metastability for expanding bubbles on a sticky substrate
- Bernoulli-IMS One World Symposium   *August 2020*
  short talk: metastability for expanding bubbles on a sticky substrate
- XXIII Brazilian School of Probability   *July 2019*
  poster: Cutoff for polymer pinning dynamics in the repulsive phase

- Probability Summer School Saint-Flour (France),   *July 2019*
  short talk: Cutoff for polymer pinning dynamics in the repulsive phase

Language

Mandarin (native)	Cantonese (native)	English (fluent)	Portuguese (advance)	French (basic)

Programming

Mathematica	MATLAB

Visit

- 30 December 2023 — 13 January 2024   Academy of Mathematics and Systems Science
  Short visit   Host: Quan Shi
- 11 December 2023 — 29 December 2023   Bimsa
  Short visit   Host: Yuval Peres
- 02 December 2023 — 10 December 2023   Tsinghua University & Peking University
  Short visit   Host: Chenlin Gu, Xinyi Li
- 29 November 2023 — 2 December 2023   Southern University of Science and Technology
  Short visit   Host: Jieliang Hong, Raúl Ures
- 8 November 2023 — 15 November 2023   Sichuan University
  Short visit   Host: Yinshan Chang
- 2 November 2023 — 7 November 2023   Academy of Mathematics and Systems Science
  Short visit   Host: Hui Xiao
- 27 October 2023 — 1 November 2023   Harbin Institute of Technology
  Short visit   Host: Jinghao Huang
- May 2021 — February 2022   Instituto de Matemática Pura e Aplicada
  Visiting fellow   Host: Hubert Lacoin

Referee for journals

Annals of applied probability	Annals of probability
Communications in Mathematical Physics	Electronic Journal of Probability

Award

Colman-Soref scholarship	2023, Israel

Miscellanies

2018 ICM Volunteer (Rio de Janeiro)