Curriculum Vitae

Shangjie Yang
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Positions

- February 2022 -present   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   Accepted by Annals of Applied Probability
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

- 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

- 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   Electronic Journal of Probability
Communications in Mathematical Physics

Award

Colman-Soref scholarship (2023, Israel)

Miscellanies

2018 ICM Volunteer (Rio de Janeiro)