# Curriculum Vitae

# Shangjie Yang

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## **Positions**

• March 2022 -present Postdoc

• November 2021- February 2022 Postdoc (online)

• July 2021- October 2021 Postdoc (online)

Bar-Ilan University Host: Gidi Amir and Naomi Feldheim

> Universidade Federal de Bahia Host: Tertuliano Franco

> > Bar-Ilan University Host: Gidi Amir

# Education

• March 2017-April 2021 Ph.D. student

• March 2015-February 2017 Master student

 September 2013-December 2014 Master student

• September 2009-June 2013 Undergraduate student Instituto de Matemática Pura e Aplicada Adviser: Hubert Lacoin

Instituto de Matemática Pura e Aplicada Adviser: Vladas Sidoravicius

Nankai University
Adviser: Kainan Xiang
Sun Yat-sen University

## 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 submitted.

4. **G. Amir, S.Yang,** The branching number of intermediate growth trees Arxiv: 2205.14238 submitted.

3. **H. Lacoin, 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, 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)
- 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)

| • Weizmann: Students Probability Day IX   | May 2023                            |
|---|-------------------------------------|
| Short talk: Typical height of the $(2+1)$ -D Solid-on-Solid surface with pin  | ning 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 the delocalized phase   | g above a wall in                   |
| • Technion  | March 2023                          |
| Talk: Typical height of the (2+1)-D Solid-on-Solid surface with pinning the delocalized phase   |                                     |
| <ul> <li>Bar-Ilan University</li> <li>Talk: The branching number of intermediate growth trees</li> </ul>  | Dec 2022                            |
| <ul> <li>Tsinghua UPeking UBKU Webminar</li> <li>Talk: Mixing time of ASEP in a random environment</li> </ul>                                       | Sep~2022                            |
| • 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 short talk: metastability for expanding bubbles on a sticky substrate   | August 2020                         |
| • XXIII Brazilian School of Probability poster: Cutoff for polymer pinning dynamics in the repulsive phase  | July 2019                           |
| <ul> <li>Probability Summer School Saint-Flour (France),</li> <li>short talk: Cutoff for polymer pinning dynamics in the repulsive phase</li> </ul> | July 2019                           |
| Language  |                                     |
| Mandarin (native) Cantonese (native) English (fluent) Portuguese (fluent)   | French (basic)                      |
| Programming   |                                     |
| Mathematica MATLAB  |                                     |
| Visit   |                                     |
| • May 2021- February 2022 Instituto de Matemática<br>Visiting fellow Hos  | Pura e Aplicada<br>t: Hubert Lacoin |
| Referee for the journal   |                                     |
| Annals of applied probability Electronic Journal of Probability   |                                     |
| Award   |                                     |
| Kolman-Soref scholarship (2023, Israel)   |                                     |
| Miscellanies  |                                     |
| MINOCHAINES   |                                     |

Volunteers ICM 2018 (Rio de Janeiro)