

# 杨尚杰

圣保罗大学

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## 工作经历

- 2024 年 3 月至今 圣保罗大学 博士后  
导师: Leonardo Rolla
- 2022 年 3 月- 2024 年 2 月 巴伊兰大学 博士后  
导师: Gideon Amir&Naomi Feldheim
- 2021 年 11 月- 2022 年 2 月 联邦巴伊亚大学 博士后 (线上)  
导师: Tertuliano Franco
- 2021 年 7 月- 2021 年 10 月 巴伊兰大学 博士后 (线上)  
导师: Gideon Amir

## 教育背景

- 2017 年 3 月- 2021 年 4 月 巴西国立纯数学与应用数学研究所 博士生  
导师: Hubert Lacoin
- 2015 年 3 月- 2017 年 2 月 巴西国立纯数学与应用数学研究所 硕士生  
导师: Vladas Sidoravicius
- 2013 年 9 月- 2014 年 12 月 南开大学 硕士生 (肄业)  
导师: 向开南
- 2009 年 9 月- 2013 年 6 月 中山大学 本科生

## 研究方向

我的研究集中在概率论和统计力学的交叉领域: 马尔可夫链及其混合时间、随机聚合物模型、相互作用粒子系统、随机环境中的随机游走、高斯随机函数。

## 学术论文

- **S. Yang**, Cutoff of the simple exclusion process with inhomogeneous conductances  
Arxiv:2409.16337
- **S. Yang**, The spectral gap and principle eigenfunction of the random conductance model in a line segment Arxiv:2408.07139
- **Y. Wang, K. Xiang, S. Yang**, and L. Zou The high-order corrections of discrete harmonic measures and their correction constants  
**Journal of Statistical Physics**. Volume 191, article number 81, (2024)
- **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.
- **G.Amir and S.Yang**, The branching number of intermediate growth trees Arxiv:2205.14238

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**Groups, Geometry, and Dynamics.** 2024.

- **H. Lacoïn and S. Yang**, Mixing time of the asymmetric simple exclusion process in a random environment

Arxiv:2102.02606

**Annals of Applied Probability.** 34(1A): 388-427 (February 2024).

- **H. Lacoïn and S. Yang**, Metastability for expanding bubbles on a sticky substrate

Arxiv:2007.07832

**Annals of Applied Probability.** 32(5): 3408-3449 (October 2022).

- **S. Yang**, Cutoff for polymer pinning dynamics in the repulsive phase Arxiv:1909.04635

**Annales de l'Institut Henri Poincaré, Probabilités et Statistiques.** 57(3): 1306-1335 (2021).

## 教学经历

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- **圣保罗大学**

组合分析、概率及其应用 (2025 年 1 月- 2 月)

- **联邦巴伊亚大学**

短期课程：界面模型和粒子系统的混合时间 (2021 年 11 月- 2022 年 1 月)

- **巴西国立纯数学与应用数学研究所 (助教)**

-概率论 1 (2018 年 3 月- 6 月)

-随机过程 (下) (2019 年 10 月- 11 月)

-马尔可夫链和混合时间 (2020 年 1 月- 2 月)

## 学术报告

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- Indian Institute of Technology Madras, October 2024

Talk: Spectral gap and cutoff of the simple exclusion process with IID conductances

- Universidade de São Paulo, September 2024

Talk: Spectral gap and cutoff of the simple exclusion process with IID conductances

- Beijing Normal University, September 2024

Talk: Spectral gap and cutoff of the simple exclusion process with IID conductances

- Universidade Federal da Bahia, June 2024

Talk: Metastability for expanding bubbles on a sticky substrate

- Universidade de São Paulo, April 2024

Talk: Mixing Time of ASEP in a random environment

- Conference: Probability and Statistical Physics, January 2024

Talk: Mixing Time of ASEP in a random environment

- Beijing Normal University, January 2024

Talk: Metastability for expanding bubbles on a sticky substrate

- Harbin Institute of Technology, December 2023

Talk: Metastability for expanding bubbles on a sticky substrate

- Southern University of Science and Technology (SUSTech), November 2023

Talk: Metastability for expanding bubbles on a sticky substrate

- Sichuan University, November 2023

Talk: Cutoff for polymer pinning dynamics in the repulsive phase

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- Academy of mathematics and system science, November 2023  
Talk: Cutoff for polymer pinning dynamics in the repulsive phase
  - Nankai University, November 2023  
Talk: Cutoff for polymer pinning dynamics in the repulsive phase
  - Tsinghua University, November 2023  
Talk: Cutoff for polymer pinning dynamics in the repulsive phase
  - Harbin Institute of Technology, October 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, December 2022  
Talk: The branching number of intermediate growth trees
  - Tsinghua U.-Peking U.-BKU Webminar, September 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

### 语言能力

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普通话（母语）； 粤语（母语）； 英语（流利）； 葡萄牙语（高级）； 法语（基础）

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### 编程技能

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Mathematica; MATLAB

### 学术期刊审稿资格

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- Annales de l'Institut Henri Poincaré, Probabilités et Statistiques
- Annals of Applied Probability
- Annals of Probability
- Communications in Mathematical Physics
- Electronic Journal of Probability

### 获奖情况

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Colman-Soref scholarship

2023, Israel

### 其他经历

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2018 ICM Volunteer (Rio de Janeiro)