XIANGHUI SHI

Beijing International Center for Mathematical Research, Peking University
No.5 Yiheyuan Road, Haidian District, Beijing, China
xhshi@pku.edu.cn ⋄ http://shixianghui.github.io/

EDUCATION

Ph.D. in Mathematics, 2021–present
Peking University, Beijing, China

B.Sc. in Mathematics, 2017–2021
Peking University, Beijing, China

RESEARCH

Journal Articles

1. X. Shi (with Zhiqiang Li and Yiwei Zhang), Thermodynamic formalism for subsystems of expanding Thurston maps and large deviations asymptotics. Proc. Lond. Math. Soc. (3) 130, (2025), e70019. 77 pages.

Preprints

2. X. Shi (with Zhiqiang Li), Thermodynamic formalism for subsystems of expanding Thurston maps II. Submitted, arXiv:2404.07247. 46 pages.

3. X. Shi (with Zhiqiang Li), Entropy density and large deviation principles without upper semi-continuity of entropy. Submitted, arXiv:2406.01712. 59 pages.

4. X. Shi (with Ilia Binder, Qiandu He, Zhiqiang Li), Computable thermodynamic formalism. Submitted. 39 pages.

AWARDS

Young Elite Scientists Sponsorship Program for PhD Students, China Association for Science and Technology, 2024
College Award, Peking University, 2023–2024
BICMR Huaixin Scholarship (Outstanding Undergraduate Researchers), Peking University, 2021
Academic Excellence Award, Peking University, 2018–2019
3$^{\mathrm{rd}}$ Prize Scholarship, Peking University, 2018–2019
Merit Student, Peking University, 2017–2018

SELECTED TALKS

Ergodic theory of expanding Thurston maps and their subsystems. Seminar in Dynamic Systems at ISTA, Institute of Science and Technology Austria, Vienna, Austria, December 3, 2024

Entropy density and large deviation principles without upper semi-continuity of entropy. The Second National Forum for Doctoral Students at the Frontiers of Mathematics, Peking University, Beijing, China, October 31–November 1, 2024

Ergodic theory of subsystems of expanding Thurston maps. Conference on Dynamical Systems and Fractal Geometry, University of North Texas, Denton, USA, May 14–17, 2024

TEACHING EXPERIENCE

Graduate Teaching Assistant, School of Mathematics, Peking University.
- Taught discussion sessions for Mathematical Analysis (I)/(II)/(III), 2021—present