# XIANGHUI SHI

No.5 Yiheyuan Road, Haidian District, Beijing, China +86 13521572983 ⋄ xhshi@pku.edu.cn

# **EDUCATION**

Peking Universty, Beijing, China

PhD in Mathematics, September 2021—present

Advisor: Zhiqiang Li

Peking Universty, Beijing, China

BS in Mathematics, September 2017—June 2021

### RESEARCH

#### Research Interests

Dynamical Systems, Complex Dynamics, Ergodic Theory

## **Publications and Preprints**

X. Shi (with Jianyu Chen, Vadim Kaloshin, Zhiqiang Li), Length spectrum rigidity for Z2-symmetric Bunimovich stadia. In preparation.

X. Shi (with Zhiqiang Li), Statistics of prime orbits for expanding Thurston maps. In preparation.

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

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

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

X. Shi (with Zhiqiang Li and Yiwei Zhang), Thermodynamic formalism for subsystems of expanding Thurston maps and large deviations asymptotics. To appear in Proc. Lond. Math. Soc. (3), arXiv:2312.15822. 57 pages.

## AWARDS

College Award, Peking Universty, 2023—2024

Academic Excellence Award, Peking Universty, 2018-2019

3<sup>rd</sup> Prize Scholarship, Peking Universty, 2018—2019

Winning Prize in 10-th S.-T. Yau College Students Mathematics Contests (Analysis), 2019

Merit Student, Peking Universty, 2017—2018

2<sup>nd</sup> Prize in National Mathematics competition of College Students, 2018

### **TEACHING**

Graduate Teaching Assistant, School of Mathematics, Peking University.

- Taught discussion sessions for Mathematical Analysis (I)/(II)/(III), 2021—present

# CONFERENCES AND WORKSHOPS

Dynamical Systems and Fractal Geometry. University of North Texas, Denton, USA, May 14-17, 2024

Quasiworld Workshop. University of Helsinki, Helsinki, Finland, August 14-18, 2023

Fractal Spaces and Dynamical Systems. Urgench State University, Urgench, Uzbekistan, August  $4\text{-}9,\,2023$ 

Around the Mandelbrot set. Kyoto Universty, Kyoto, Japan, May 29 to June 2, 2023

# PROFESSIONAL SKILLS

Programming Languages: C++ / Python / Matlab / LATEX