

# Zhi-Feng Wei

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## CONTACT INFORMATION

Department of Mathematics  
Indiana University  
831 East Third Street  
Bloomington, IN 47401, USA

Mobile: +1 (812)391-0426  
Email: [zfwei@iu.edu](mailto:zfwei@iu.edu)  
Homepage: [zf-wei.github.io](https://zf-wei.github.io)

## RESEARCH INTERESTS

Probability, and Graph Theory.

## EDUCATION

### Department of Mathematics, Indiana University (IU)

Ph.D. in Mathematics (expected May 2024)

- Advisor: Prof. Russell Lyons
- Minor in Statistics

### School of Mathematical Sciences, Beijing Normal University (BNU)

M.S. in Mathematics, June 2018

- Advisor: Prof. Mu-Fa Chen
- Graduation with Honor: Excellence Award from Beijing Municipality & BNU

### Beijing International Center for Mathematical Research, Peking University

Visiting Student, 7<sup>th</sup> Enhanced Program for Graduate Study, Spring 2015

Courses: Functional Analysis, Riemannian Geometry

### Cuiying Honors College, Lanzhou University (LZU)

B.S. in Mathematics, June 2015

- Advisor: Prof. Heping Zhang

## PUBLICATIONS & PREPRINTS

- (1) *Sharp Bounds on Eigenvalues via Spectral Embedding Based on Signless Laplacians*, J. Funct. Anal., **284**(5)(2023), Article 109799.
- (2) *Inverse Problems for Ergodicity of Markov Chains*, J. Math. Anal. Appl., **505**(2)(2022), Article 125483.
- (3) *Number of Matchings of Low Order in (4,6)-Fullerene Graphs*, (with H. Zhang) MATCH Commun. Math. Comput. Chem., **77**(3)(2017), 707–724.

## INVITED PRESENTATIONS

- (1) *Bound Return Probabilities via Spectral Embedding*, Beijing Institute of Technology (Zoom talk), Dec 2022.
- (2) *Bound Return Probabilities via Spectral Embedding Method*, Grad Student Probability Conference, University of Wisconsin, Sept 2022.
- (3) *Bound Return Probabilities via Spectral Embedding Method*, 20<sup>th</sup> Northeast Probability Seminar, CUNY (Zoom talk), Nov 2021.

AWARDS	2019	James Williams Memorial Award, Department of Mathematics, IU	
	2018	College of Arts and Sciences Graduate Fellowship, IU	
	2016	National Merit Scholarship of China	
	2016	Excellent Teaching Assistant Award, BNU	
	2014	Cuiying Student Innovation Fund, LZU	
	2012–14	Outstanding Student Scholarship, LZU	
	2012	Scholarship for Outstanding Mathematics Majors, School of Mathematics & Statistics, LZU	
EMPLOYMENT	Fall	2022	Teaching, Math-M018: Basic Algebra for Finite Math, Section 4075
	Fall	2022	Teaching, Math-M018: Basic Algebra for Finite Math, Section 4074
	Summer	2022	Preparation Session for Math Qualifying Exam in Analysis
	Fall	2021	Recitation, Math-M211: Calculus I
	Summer	2021	Preparation Session for Math Qualifying Exam in Analysis
	Spring	2021	Co-Teaching, Math-M106: Mathematics of Decision and Beauty
	Fall	2020	Grading, Math-M463: Intro to Probability Theory I
	Spring	2020	Grading, Math-M464: Intro to Probability Theory II
	Fall	2019	Grading, Math-M463: Intro to Probability Theory I
	Summer	2019	Co-Teaching, Math-M106: Mathematics of Decision and Beauty
	Fall	2018	Grading, Math-M365: Intro to Probability and Statistics
	Fall	2016	Teaching Assistant, Linear Algebra (BNU)
LANGUAGES	Chinese: <b>Native</b>		
	English: <b>Fluent</b>		
	French: <b>Elementary</b>		
PROFESSIONAL AFFILIATION	American Mathematical Society		
REFERENCES	<b>Russell Lyons</b> , James H. Rudy Professor of Mathematics, Indiana University, (812)855-1645, <a href="mailto:rdlyons@indiana.edu">rdlyons@indiana.edu</a>		