

# MIN ZHAO

Date of Birth: 16 January 1992

Address: No.19, Xinjiekouwai St, Haidian District,

Beijing, 100875, China Phone: +86 18801158612

Email: minzhao@mail.bnu.edu.cn

Webpage: https://minzhao123.github.io/MinZhao/

#### RESEARCH INTERESTS

• Partial differential equations and dynamic systems Reaction-diffusion equations, Nonlocal problems, Traveling waves, Spreading speed

Biomathematics
 Prey-predator system, Nonlinear differential equation, Epidemic model

Stochastic theory and process
 Brownian motion, Ergodic, Lévy process

### SCIENTIFIC EDUCATION

09/2019-07/2023	Ph.D., Fundamental mathematics	
	Prof. Rong Yuan, Beijing Normal University, China	
09/2021-09/2022		
	Prof. Pierre Magal, University of Bordeaux, France	
	Prof. Quentin Griette, Université Le Havre Normandie, France	
09/2016-06/2019	Master degree, Mathematics	
	Prof. Xiaoyun Wang, Taiyuan University of Technology, China	
09/2011-06/2015	Bachelor degree, Mathematics and Applied Mathematics	
	Shanxi Datong University, China	

### RESEARCH PUBLICATIONS

### Publications

- 1. **M. Zhao**, R. Yuan, Z. Ma, X. Zhao, Spreading speeds for the predator-prey system with nonlocal dispersal, *Journal of Differential Equations*, 316 (2022), 552–598.
- 2. **M. Zhao**, Z. Ma, R. Yuan, The spreading speed and the existence of planar waves for a class of predator-prey system with nonlocal diffusion, *Taiwanese Journal of Mathematics*, 26(2) (2022), 381–410.
- 3. Y. Cheng, F. Zhang, **M. Zhao**, A stochastic model of HIV infection incorporating combined therapy of HAART driven by Lévy jumps, *Advances in Difference Equations*, 321 (2019), 1–17.
- 4. X. Wang, M. Zhao, X. Wang, S. Li, N. Cao, H. Liu, The Application of Dynamic Models to the Exploration of beta1-AR Overactivation as a Cause of Heart Failure, *Computational and Mathematical Methods in Medicine*, 2018 (2018) 1613290.

### Preprints

- 1. **M. Zhao**, R. Yuan, Persistence of solutions in a nonlocal predator-prey system with a shifting habitat, submitted, arXiv:2306.00649, (2023), 1–23.
- 2. H. Li, **M. Zhao**, R. Yuan, Traveling Wave in a Ratio-dependent Holling-Tanner System with Nonlocal Diffusion and Strong Allee Effect, submitted, arXiv:2306.00666, (2023), 1–27.
- 3. H. Li, M. Zhao, R. Yuan, Traveling Waves of Modified Leslie-Gower Predator-prey Systems, submitted, arXiv:2306.00701, (2023), 1–32.
- 4. H. Li, M. Zhao, R. Yuan, A sufficient condition on successful invasion by the predator, submitted, arXiv:2306.00713, (2023), 1-9.

- 5. **M. Zhao**, R. Yuan, Existence and Stability of Random Transition Waves for Nonautonomous Fisher-KPP Equations with Nonlocal Diffusion, submitted, arXiv:2305.19762, (2023), 1–27.
- 6. Q. Griette, P. Magal, **M. Zhao**, Traveling waves with continuous profile for hyperbolic Keller-Segel equation, submitted, arXiv:2204.06920, (2022), 1–27.

# **CONFERENCES AND COURSE**

10/2022	International Conference on Nonlinear Partial Differential Equations
	2022 and in honor of Prof. Hiroshi Matano's 70th Birthday
10/2022	Monotone Semiflows and Propagation Dynamiac
	Prof. Xiaoqiang Zhao, Memorial University of Newfoundland, Canada
9-10/2022	Introduction to the Theory of Traveling Waves
	Prof. Henri Berestycki, EHESS, Paris
10/2019	Symposium on Differential Equations and Dynamic Systems and com-
	memorated the 90th anniversary of the birth of Mr. Tongren Ding
11/2017	Conference on Dynamical Systems and Biomathematics
-	Shanxi University
07/2016	Biomathematics Summer School
•	Peking University

# **RESEARCH PROJECTS**

01/2022-12/2025	The National Natural Science Foundation of China	
(participated)	Some problems in the differential equation of almost periodic and time-	
	delay (No. 12171039)	

#### AWARDS AND HONOR

2022	Graduate Academic Innovation Award Special Prize
	Beijing Normal University
2021	Third Class Academic Scholarship
	Beijing Normal University
2020	Second Class Academic Scholarship
	Beijing Normal University
2019-2020	Outstanding undergraduate teaching assistant
	Beijing Normal University
2018-2019	Second class academic scholarship
	Taiyuan University of Technology
2013-2014	National Inspirational Scholarship
	Shanxi Datong University

## **WORK EXPERIENCE**

09/2020-01/2021	Advanced Algebra Exercises
	Beijing Normal University
08/2015-08/2016	Junior high school mathematics
	tutoring institution in Datong of Shanxi Province, China
09/2014-11/2014	Junior high school mathematics
. ,	Yungang Middle School in Datong of Shanxi Province, China

### **SKILLS**

Language	Chinese (Native), English
Professional Knowledge	Office, LaTeX, Matlab, OriginPro

### INTERESTS AND ACTIVITIES

- Reading (Detective and reasoning books are my favorite)
- Travelling