

# Zhilong Xue

## Curriculum Vitae

(Apr. 2025)

### Personal Details

Name: Zhilong Xue  
Date of Birth: September 13, 1998  
Nationality: Chinese  
Email: zhilongxue@mail.bnu.edu.cn  
Address: School of Mathematical Sciences, Beijing Normal University, 100875, Beijing, China

### Research Interests

Analysis, partial differential equations and fluid mechanics

### Education

Sep. 2020—Current	Beijing Normal University, PhD candidate in mathematics	Supervisor: Liutang Xue
Sep. 2016—Jun. 2020	Chang'an University, BS in mathematics	Ranked: 1st/29

### Research Stays

Oct. 2023 — Oct. 2024	Visiting PhD student, University of Seville, Spain Supervisor: Francisco Gancedo Funded by China Scholarship Council (No. 202306040124)
Sep. 2024 — Oct. 2024	Visiting PhD student, University of Granada, Spain Host: Claudia García

### Publications and Preprints

- Qianyun Miao, Changhui Tan, Liutang Xue, and Zhilong Xue. *Local regularity and finite-time singularity for a class of generalized SQG patches on the half-plane*. ArXiv:2410.19273.
- Taoufik Hmidi, Liutang Xue, and Zhilong Xue. *Unified theory on V-states structures for active scalar equations*. ArXiv:2312.02874.
- Taoufik Hmidi, Liutang Xue, and Zhilong Xue. *Emergence of time periodic solutions for the generalized surface quasi-geostrophic equation in the disc*. Journal of Functional Analysis **285** (2023), no. 10, Paper No. 110142.

### Invited Talks

16/10/2024	PhD seminar, IMUS, University of Seville, Spain
21/03/2024	Ecuaciones Diferenciales seminar, IMAG, University of Granada, Granada, Spain
13/11/2023	Fluid Conversations seminar, IMUS, University of Seville, Spain

### Conferences

Nov. 2024	Mixing, enhanced dissipation and stability effects in fluid dynamics, Kunming, China
Jul. 2024	Alhambra PDE days, IMAG, University of Granada, Spain
Jul. 2024	9th European Congress of Mathematics, University of Seville, Spain

### Awards

Dec. 2023	First-class Scholarship, Beijing Normal University, China
Jul. 2023	Scholarship for study abroad, China Scholarship Council, China
Dec. 2022	First-class Scholarship, Beijing Normal University, China
Dec. 2021	First-class Scholarship, Beijing Normal University, China
Dec. 2019	National Scholarship for undergraduate students, Ministry of Education of China, China