

Zhilong Xue

Curriculum Vitae

(Jun. 2025)

Personal Details

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

Research Interests

Analysis and partial differential equations

Education

Sep. 2020—Jun. 2025 **Beijing Normal University**, PhD in mathematics **Supervisor:** Liutang Xue
Sep. 2016—Jun. 2020 **Chang'an University**, BS in mathematics

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

1. Taoufik Hmidi, Liutang Xue, and Zhilong Xue. *Doubly connected V-states in geophysical models: a general framework*. arXiv:2504.08143.
2. 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.
3. Taoufik Hmidi, Liutang Xue, and Zhilong Xue. *Unified theory on V-states structures for active scalar equations*. ArXiv:2312.02874.
4. 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

Jun. 2025 *Advances in Mathematical Fluid Dynamics*, Peking University, China
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