Wei WANG

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https://luisyanka.github.io/WeiWANGmath.github.io/

Education

Ph.D in Theoretical Mathematics
Peking University, Beijing, China
Expected Graduation: June 2027
Advisor: Prof. Zhifei Zhang

Summer Research Program
The Hong Kong University of Science and Technology
June 2021- September 2021
Advisor: Assoc. Prof. Tianling Jin

Bachelor of Mathematics and Applied Mathematics
Zhejiang University, Hangzhou, Zhejiang, China
September 2018-June 2022
Advisor: Prof. Zhifei Zhang
Thesis: Homogenization Problem of Second-order Elliptic Systems with Lower Order Terms

Research Interests

Geometric Variational problems, liquid crystal models, harmonic maps, elliptic equations, parabolic equations, and harmonic heat flows.

Publications and Preprints

1. H. Fu, W. Wang, and Z. Zhang, Quantitative stratification and sharp regularity estimates for supercritical semilinear elliptic equations, *arXiv preprint arXiv:2404.00677* (2024).
2. W. Wang and Z. Zhang, Landau-de Gennes model with sextic potentials: asymptotic behavior of minimizers, *arXiv preprint arXiv:2404.00677* (2024).
3. R.L. Frank, T. Jin, and W. Wang, On the sharp constants in the regional fractional Sobolev inequalities, *arXiv preprint arXiv:2403.00357*, (2024).
4. W. Wang, Uniform estimates of resolvents in homogenization theory of elliptic systems, *Journal of Differential Equations*, **370** (2023), 1-65.
5. W. Wang and T. Zhang, Homogenization theory of elliptic system with lower order terms for dimension two, *Communications on Pure and Applied Analysis*, **22** (2023), 787-824.

Honors and Awards

Oct. 2023	Top notch Mathematics Graduate Program Awarding Institution, Peking University
Aug. 2022	Excellent Award of ICCM Creative Undergraduate Thesis
June. 2022	Outstanding Graduate Student of Zhejiang University
June. 2022	Honored Degree of Chu Kochen College, Zhejiang University

Seminars and Conferences Organized

Fall 2022	Reading Seminar on Elliptic Free Boundary Problems, Peking University
Spring 2023	Reading Seminar on the Paper "Rectifiable-Reifenberg and the Regularity of Stationary and Minimizing Harmonic Maps" by Aaron Naber and Daniele Valtorta, Peking University

Talks

Apr. 2024	Graduate Research Exhibition, Theoretic Mathematics, Peking University
Aug. 2022	ICCM Creative Undergraduate Thesis, Southeast University

Teaching

Peking University	Fall 2024	Advanced Mathematics (A) (I), Teaching Assistant Lecturer: Assoc. Prof. Jinbiao Wu
	Spring 2024	Advanced Mathematics (B) (II), Teaching Assistant Lecturer: Prof. Xufeng Liu
	Fall 2023	Harmonic Analysis, Teaching Assistant Lecturer: Asst. Prof. Dongyi Wei
	Spring 2023	Functional Analysis (1), Teaching Assistant Lecturer: Prof. Zhifei Zhang.
	Fall 2022	Advanced Mathematics (C) (I), Teaching Assistant Lecturer: Prof. Zhengdong Wang
Zhejiang University	Fall 2022	Mathematical Analysis (I), Teaching Assistant Lecturer: Prof. Meng Wang.