

LING WANG

Ph.D. School of Mathematical Science, Peking University

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PERSONAL INFORMATION

Gender	Male	Citizenship	Chinese Citizen
Date of Birth	July 18, 1998	Marital status	Single
Place of Birth	Chongqing, China		

RESEARCH INTERESTS

Geometric Analysis & Nonlinear PDEs, especially Monge-Ampère type equations

POSITIONS

Bocconi Institute for Data Science and Analytics, Bocconi University <i>Postdoctoral Fellow</i> <ul style="list-style-type: none">Supervisor: Prof. Antonio De Rosa	Milan, Italy 2025.9 – 2027.8
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EDUCATION

School of Mathematical Science, Peking University <i>Ph.D. in Pure Mathematics</i> <ul style="list-style-type: none">Thesis: Monge-Ampère type fourth-order equations and applicationsSupervisor: Prof. Bin Zhou	Beijing, China 2020.9 – 2025.6
Beijing International Center for Mathematical Research, Peking University <i>Visiting student, Pure Mathematics</i>	Beijing, China 2020.2 – 2020.6
School of Mathematical Science, Beijing Normal University <i>B.S. in Mathematics and Applied Mathematics</i> <ul style="list-style-type: none">Thesis: A Study on the Depth Dependence of Inclusions in Inverse ProblemsSupervisor: Prof. Haigang Li	Beijing, China 2016.9 – 2020.6

PUBLICATIONS AND PREPRINTS

- [8] W. K. Du, L. Wang, Y. Yang. Flat level sets of Allen-Cahn equation in half-space. Preprint.
- [7] L. Wang, B. Zhou. The partial Legendre transform in Monge-Ampère equations. Preprint.
- [6] L. Wang. Interior Hölder regularity of the linearized Monge-Ampère equation. *Calc. Var. Partial Differential Equations*, **64** (2025), no. 1, Paper No. 17.
- [5] L. Wang, B. Zhou. $C^{1,\alpha}$ regularity of variational problems with a convexity constraint. Preprint.
- [4] L. Wang, B. Zhou. Liouville theorems for a class of degenerate or singular Monge-Ampère equations. *J. Geom. Anal.*, **34** (2024), no. 11, Paper No. 352.
- [3] Y. H. Kim, N. Q. Le, L. Wang, B. Zhou. Singular Abreu equations and linearized Monge-Ampère equations with drifts. To appear in *J. Eur. Math. Soc. (JEMS)*.
- [2] L. Wang, B. Zhou. Interior estimates for Monge-Ampère type fourth order equations. *Rev. Mat. Iberoam.*, **39** (2023), no. 5, 1895–1923.
- [1] H. G. Li, J. -N. Wang, L. Wang. Refined stability estimates in electrical impedance tomography with multi-layer structure. *Inverse Probl. Imaging*, **16** (2022), no. 1, 229–249.

AWARDS & HONORS

- **Outstanding Graduates**, Peking University 2025
- **China National Scholarship**, Ministry of Education of the People’s Republic of China 2024
- **Presidential Scholarship**, Peking University
- **Outstanding Research Award**, Peking University
- **Presidential Scholarship**, Peking University 2023
- **Merit Student**, Peking University
- **Exceptional Award for Academic Innovation**, Peking University 2022
- **Outstanding Graduates**, Beijing Normal University 2020
- **The First Prize Scholarship**, Beijing Normal University

CONFERENCE TALKS

- 3. **Title:** *Monge-Ampère type equations in two dimensions* June 29-July 5, 2025
Workshop on Geometric Analysis 2025 (30 minutes), Research Center for Mathematics and Interdisciplinary Sciences of Shandong University, Qingdao, China
- 2. **Title:** *Flat level sets of Allen-Cahn equation in half-space* March 15, 2025
Workshop on Geometric Analysis and Ricci Flow 2025, Institute for Theoretical Sciences of Westlake University, Hangzhou, China
- 1. **Title:** *Singular Abreu equations and linearized Monge-Ampère equations with drifts* July 21-27, 2024
Workshop on Geometric Analysis 2024 (30 minutes), School of Mathematical Sciences of Inner Mongolia University, Hohhot, China

SEMINAR & COLLOQUIUM TALKS

- 6. **Title:** *Interior estimates for the Monge-Ampère type fourth-order equations* May 6, 2025
Mathematics Colloquium, School of Mathematical Sciences of Nankai University, Tianjin, China
- 5. **Title:** *A revisit to the De Giorgi conjecture: Savin’s proof and applications* April 21, 2025
Geometry & Topology seminar, Institute of Mathematical Sciences of ShanghaiTech University, Shanghai, China
- 4. **Title:** *Partial Legendre transform: two-dimensional and higher-dimensional cases* April 17, 2025
Geometry & Analysis seminar, School of Mathematical Sciences of Shanghai Jiao Tong University, Shanghai, China
- 3. **Title:** *Bernstein-type theorems for geometric PDEs* April 16, 2025
Mathematics Colloquium, School of Mathematical Sciences of Fudan University, Shanghai, China
- 2. **Title:** *Interior estimates for the Monge-Ampère type fourth order equations* March 24, 2024
Ph.D. Mathematics Forum (13 minutes), School of Mathematics and Statistics of Wuhan University, Wuhan, China
- 1. **Title:** *A revisit to affine Bernstein problem* March 30, 2022
Geometric PDE seminar, Academy of Mathematics and Systems Science of the Chinese Academy of Sciences, Beijing, China

TEACHING EXPERIENCE

- Peking University**
- Teaching assistant*
- Advanced math B Spring 2024
- Mathematical analysis III Fall 2023
- Mathematical analysis II Spring 2023
- Mathematical analysis I Fall 2022
- Arithmetic of elliptic curves Spring 2022

Diophantine approximation

- Mathematical analysis I
- Functional analysis
- Advanced math C

Fall 2021

Spring 2021

Fall 2020

ACADEMIC SERVICES

Referee for several journals including: *Pure and Applied Mathematics Quarterly*