Guoqing Cui

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PERSONAL INFORMATION

Gender Male
Date of Birth Oct 2002
Citizenship Chinese Citizen
Marital Status Single

EDUCATION

Peking University *Sep 2025 – Present*
Ph. D, School of Mathematical Sciences.
Advisor: Prof. Bin Zhou.

University of Chinese Academy of Sciences *Sep 2024 – Jun 2025*
Visiting student, AMSS.

Shandong University *Sep 2021 – Jun 2025*
B.S., School of Mathematics.

RESEARCH INTERESTS

Nonlinear partial differential equations; Geometric analysis;
Monge–Ampère type equations; Affine differential geometry.

PUBLICATIONS AND PREPRINTS

[3] **Guoqing Cui**, Chong Gu, Nam Quang Le, Ling Wang and Bin Zhou. *Global Hölder estimates for linearized Monge-Ampère equations in divergence form with applications to dual semigeostrophic equations and periodic homogenization*. Preprint, 2026. arXiv:2610.02071

[2] **Guoqing Cui**. *Gradient potential estimates for linearized Monge-Ampère equations*. Preprint, 2026. arXiv:2606.28910

[1] **Guoqing Cui**, Ling Wang and Bin Zhou. *Local potential and Hölder estimates for the linearized Monge-Ampère equation*. Preprint, 2025. arXiv:2511.03426

TEACHING EXPERIENCE

Mathematical Analysis III (Honor class) *Fall 2026*
Teaching Assistant, Peking University.

Mathematical Analysis II (Honor class) *Spring 2026*
Teaching Assistant, Peking University.

Partial Differential Equation *Fall 2025*
Teaching Assistant, Peking University.

HONORS AND AWARDS

Qube Research & Technologies Scholarship *2026*
Peking University.

Presidential Scholarship *2026*
Peking University.

Outstanding Graduates *2025*
Shandong University.