

Curriculum Vitae

Qile Yan

Email: yan00082@umn.edu

Employment

University of Minnesota

U.S.

Postdoctoral Associate

September 2023 – present

- Mentor: Prof. Douglas N. Arnold

Education

The Pennsylvania State University

U.S.

Ph.D. in Mathematics

August 2018 – August 2023

- Thesis supervisor: Prof. John Harlim

The Chinese University of Hong Kong

Hong Kong

M.Phil. in Mathematics

August 2016 – July 2018

- Thesis supervisor: Prof. Jun Zou

Tongji University

Shanghai, China

B.Sc. in Applied Mathematics

September 2012 - July 2016

- Thesis supervisor: Prof. Wei Wang

Research Interests

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- Numerical Analysis, Scientific Computing, Meshfree Methods on Point Clouds
 - Anderson Localization

Publications

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- Rongji Li, Qile Yan and Shixiao W. Jiang, *Generalized Moving Least-Squares for Solving Vector-valued PDEs on Unknown Manifolds*, submitted.
 - Anran Jiao, Qile Yan, John Harlim and Lu Lu, *Solving forward and inverse PDE problems on unknown manifolds via physics-informed neural operators*, submitted.
 - Shixiao W. Jiang, Rongji Li, Qile Yan and John Harlim, *Generalized finite difference method on unknown manifolds*, Journal of Computational Physics (2024).
 - Qile Yan, Shixiao W. Jiang and John Harlim, *Spectral methods for solving elliptic PDEs on unknown manifolds*, Journal of Computational Physics (2023).
 - Qile Yan, Shixiao W. Jiang and John Harlim, *Kernel-based methods for solving time-dependent advection-diffusion equations on manifolds*, Journal of Scientific Computing (2023).

Teaching Experience

University of Minnesota

Instructor

- MATH2243 Linear Algebra and Differential Equations

Fall 2024

- MATH4242 Applied Linear Algebra Spring 2024
- MATH2243 Linear Algebra and Differential Equations Fall 2023

The Pennsylvania State University

Instructor

- MATH230 Multivariable Calculus and Vector Analysis Fall 2021
- MATH230 Multivariable Calculus and Vector Analysis Fall 2020

The Chinese University of Hong Kong

Tutor

- MATH1010 University Mathematics Fall 2017
- MATH2010 Advanced Calculus Summer 2017
- MATH1010 University Mathematics Fall 2016

Positions

The Pennsylvania State University

- Graduate Teaching Assistant 2018 - 2021
- Graduate Research Assistant funded by
NSF grant DMS-1854299 2021- 2022
- ONR grant N0014-22-1-2193 2022- 2023

The Chinese University of Hong Kong

- Graduate Teaching Assistant 2016 - 2018

Computer Skills

- Proficient in MATLAB and LaTeX