

Curriculum Vitae

Qi Tao

Division of Applied Mathematics
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Education

- **Ph.D. in Mathematics**, 09/2015 – 06/2020 (expected)
School of Mathematical Sciences,
University of Science and Technology of China, Hefei, Anhui 230026, P.R. China
Advisors: Professor Chi-Wang Shu & Professor Yan Xu
- **B.S. in Mathematics**, 09/2011 – 07/2015
School of Mathematics and Statistics, Northwest Normal University,
Lanzhou, Gansu 130024, P.R. China

Professional Experience

- **Visiting Student**, 09/2018 – 06/2020
Division of Applied Mathematics, Brown University, Providence, RI 02912, USA
Advisor: Professor Chi-Wang Shu

Research Interests

- Discontinuous Galerkin (DG) finite element methods
- Post-processing of DG methods
- Superconvergence of DG methods

Publications/Preprints

- Journal Publications
 1. **Qi Tao** and Yinghua Xia, *Error estimates and post-processing of local discontinuous Galerkin method for Schrödinger equations*, Journal of Computational and Applied Mathematics, v356 (2019), pp.198-218.
 2. **Qi Tao** and Yan Xu, *Superconvergence of arbitrary lagrangian-eulerian discontinuous galerkin methods for linear hyperbolic equations*, SIAM Journal on Numerical Analysis, v57 (2019), pp.2142-2165.
- Preprints
 1. **Qi Tao**, Yan Xu and Chi-Wang Shu, *An ultraweak-local discontinuous Galerkin method for PDEs with high order spatial derivatives*, submitted.
 2. Yong Liu, **Qi Tao** and Chi-Wang Shu, *Analysis of optimal superconvergence of an ultraweak-local discontinuous Galerkin method for time dependent fourth-order equation*, submitted.

Awards and Honors

- National Scholarship for Graduate Students, 2014, Northwest Normal University.
- Ya Yang Scholarship for Graduate Students, 2015, University of Science and Technology of China.
- Chiang Chen Scholarship, 2016, University of Science and Technology of China.
- Joint Ph. D student in Brown University, Sept. 2018- Sept. 2020, China Scholarship Council.

Conferences/Workshops

- Participant
 - The Third International Workshop on Development and Application of High-order Numerical Methods: in honor of Professor Chi-Wang Shu on his 60th birthday, University of Science and Technology of China, Hefei, Anhui, China (Dec. 2016)
 - The Fourth International Workshop on the Development and Application of High-order Numerical Methods, Nanjing University, Nanjing, Jiangsu, China (May 2018)
 - Celebrating 75 Years of Mathematics of Computation, ICERM, Providence, RI, USA (Nov. 2018)

Teaching Experience

- Teaching Assistant: *Multivariable Calculus*, USTC, Spring 2018
- Teaching Assistant: *Mathematical Analysis*, USTC, Fall 2017
- Teaching Assistant: *Multivariable Calculus*, USTC, Spring 2017
- Teaching Assistant : *Mathematical Analysis(B1)*, USTC, Fall 2016
- Teaching Assistant : *Mathematical Analysis(B2)*, USTC, Spring 2016

Computer skills

- Programming: Fortran, Mathematica, Matlab, C
- Software: Mathematica, Matlab, LaTeX, Tecplot, etc.