

University of Cincinnati
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Education

Ph.D. Mathematics, Virginia Tech, 2016.

M.S. Statistics, Virginia Tech, 2016.

M.S. Mathematics, Donghua University, Shanghai, P. R. China, 2011.

B.S. Mathematics, Donghua University, Shanghai, P. R. China, 2008.

Employment

Associate Professor - Educator, Department of Mathematical Sciences, University of Cincinnati, 8. 2024– present.

Assistant Professor - Educator, Department of Mathematical Sciences, University of Cincinnati, 8. 2017–8. 2024.

Visiting Assistant Professor, Department of Applied and Computational Mathematics and Statistics, University of Notre Dame, 12. 2016 – 8. 2017.

Graduate Teaching / Research Assistant, Department of Mathematics, Virginia Tech, 8. 2011 – 5. 2016.

Teaching Experience

University of Cincinnati

MATH 1044 (Traditional & online)	<i>Applied Calculus I</i>	Fall 20, 23
MATH 1045	<i>Applied Calculus II</i>	Fall 22
MATH 1046	<i>Business Calculus</i>	Spring 22
MATH 1061/1060	<i>Calculus I & Precalculus</i>	Multiple times
MATH 1062 (Traditional & online)	<i>Calculus II</i>	Multiple times
MATH 2073 (online)	<i>Differential Equations</i>	Summer 20, 21
MATH 2074 (online)	<i>Dynamical System</i>	Summer 19
STAT 1031 (Traditional & online)	<i>Introduction to Statistics</i>	Multiple times
STAT 1034 (Traditional & online)	<i>Elementary Statistics I</i>	Fall 19, 21
STAT 1035	<i>Elementary Statistics II</i>	Spring 23, 24
STAT 2037 (Traditional & online)	<i>Probability & Statistics I</i>	Multiple times
STAT 3038	<i>Probability & Statistics II</i>	Multiple times

Notre Dame

ACMS 10145	<i>Business Statistics I</i>	Summer 2017
ACMS 20620	<i>Applied Linear Algebra</i>	Spring 2017
ACMS 40390	<i>Numerical Analysis</i>	Spring 2017
ACMS 30600	<i>Statistical Methods and Data Analysis</i>	Spring 2017

Virginia Tech

Math 1225	<i>Calculus of a Single Variable</i>	Fall 2014, 2015, Spring 2015
Math 1525 (online)	<i>Calculus with Matrices</i>	Summer 2015, 2014
Math 1205	<i>Calculus</i>	Spring 2014, Fall 2013
Math 1114	<i>Elementary Linear Algebra</i>	Summer 2013
Math 1224	<i>Vector Geometry</i>	Fall 2012

Published Paper and Book**Total Citation in google scholar: 207****Erdős number: 3**

(* identifies the corresponding author)

Submitted Articles

1. C.H. Lau and T. Wang, On periodic solutions of the Benjamin-Bona-Mahony-Burgers equation, arxiv: 2510.16162.
2. C. Zhou and T. Wang, Multiplicity of Laplacian eigenvalues that can be represented by sum of two squares using number theory, arxiv: 2503.14361.

Published Articles

3. Z. Chen, T. Wang*, and X. Xie, Bilinear estimates posed in finite domains in 2D and 3D, *Elec. J. Diff. Equ.*, 2 (Conf. 26), 171 - 178, 2025.
4. X. Gong, T. Wang*, and X. Xie, Existence and stability of forced oscillation of an abstract evolution equation, *Asian J. Control*, 1-13, 2025.
5. G. Zheng* and T. Wang, A unique continuation property and observability for a semilinear parabolic system, *ESAIM: COCV*, 30, 2024.
6. G. Zheng* and T. Wang, The moment exponential stability of infinite-dim linear stochastic switched systems, *AIMS Math*, 8(10), 24663 - 24680, 2023.
7. T. Wang* and D. Xu, A quantitative strong unique continuation property of a diffusive SIS model, *DCDS - S*, 15(6), 1599-1614, 2022.
8. G. Zheng, D. Xu, and T. Wang*, A unique continuation property for a class of parabolic differential inequalities in a bounded domain, *Comm. Pure Appl. Anal.*, 26(2), 1205-1221, 2021.

9. T. Wang* and B. Zhang, Forced oscillation of viscous Burgers' equation with a time-periodic force, *DCDS - B*, **20**(2), 547–558, 2021.
10. L. Huang, X. Yang, Y. Lu, and T. Wang*, Global attractors for a nonlinear one-dimensional compressible viscous micropolar fluid model, to appear, *Z. Angew. Math. Phys.*, **70**(2), Article 40, 2019
11. X. Yang, B. Feng, T. M. de Souza, and T. Wang*, Long-time dynamics for a non-autonomous Navier-Stokes-Voigt equation in Lipschitz domains, *DCDS - B*, **24**(1), 363 – 386, 2019.
12. Taige Wang, Mathematical analysis on the PEC model for thixotropic fluids, Ph. D. dissertation, Virginia Tech, 2016.
13. M. Renardy* and T. Wang, Development of shear bands for a model of a thixotropic yield stress fluid, *J. Non-Newtonian Fluid Mech.***233**, 5–12, 2016.
14. Y. Qin, X. Liu and T. Wang. *Global existence and uniqueness of nonlinear evolutionary fluid equations*, *Frontier in Mathematics*, Birkhauser, Basel, 2015.
15. M. Renardy* and T. Wang, Large amplitude oscillatory shear flows for a model of a thixotropic yield stress fluid, *J. Non-Newtonian Fluid Mech.***222**, 1–17, 2015.
16. Y. Qin*, G. Hu, T. Wang, L. Huang and Z. Ma. Remarks on global smooth solutions to a 1D self-gravitating viscous radiative and reactive gas, *J. Math. Anal. Appl.* **408**(1), 19–26, 2013.
17. Y. Qin*, T. Wang, and G. Hu, The Cauchy problem for a 1d compressible viscous micropolar fluid model: Analysis of the stabilization and the regularity, *Nonlinear Analysis RWA* **13**(3), 1010–1029, 2012.
18. Y. Qin*, G. Hu, and T. Wang, Global smooth solutions for the compressible viscous and heat-conductive gas, *Quart. Appl. Math.* **69**(3), 509–528, 2011.
19. T. Wang and F. Xie*, Existence and uniqueness of fractional differential equation with integral boundary conditions, *J. Nonlinear Sciences and Appl.* **1**(4), 206–212, 2008.

Other publications: statistical consulting, and educational articles

20. Zhenhe Pan*, Taige Wang, Yuanlin Zhang, COVID-19 SIHR Modeling and Dynamic Analysis, 2021 IEEE 45th Annual Computers, Software, and Applications Conference (COMPSAC), 1 ,1711 IEEE Computer Society.
21. Taige Wang, The influence of the Pandemic on my online math teaching style, *J. Research Practice in College Teaching*, **6**(2), 2021.

Awards and Honors

- Taft Travel Award, Taft Research Center, University of Cincinnati, 2025.
 Faculty Development Funding, College of Arts & Science, University of Cincinnati, 2025.
 Taft Travel Award, Taft Research Center, University of Cincinnati, 2024.
 Travel award by conference organizer, 9th SIAM Central States Section Annual Meeting, University of Missouri, Kansas City, 2024.
 Faculty Development Funding, College of Arts & Science, University of Cincinnati, 2023.

Travel award by conference organizer, 8th SIAM Central States Section Annual Meeting, University of Nebraska, 2023.

Faculty Development Funding, College of Arts & Science, University of Cincinnati, 2022.

Taft Travel Award, Taft Research Center, University of Cincinnati, 2022.

Faculty Development Funding, College of Arts & Science, University of Cincinnati, 2021.

Faculty Development Funding, College of Arts & Science, University of Cincinnati, 2019.

Dr. Simon Anderson Faculty Recognition Award nominee, 2019.

Darwin T. Turner 2019 breakfast of champion, honored for faculty's positive contribution on students' successes.

Faculty Development Funding, College of Arts & Science, University of Cincinnati, 2018.

Fresh PhD Travel Award, SEARCDE, Florida Gulf Coast University, FL, 2016.

Math Graduate Travel Award, Joint Statistics Meeting, Chicago, IL, 2016.

Student Travel Award, SIAM conference on Analysis of PDE, Scottsdale, AZ, 2015.

Student Travel Award, SEARCDE, UNC Greensboro, 2015.

C. B. Ling Scholarship, Virginia Tech, 2015.

Recipient of a "Thank a Teacher" letter, Virginia Tech, Spring 2015.

Student Travel Award, 6th Symposium on Analysis and PDEs, Purdue University, West Lafayette, IN, 2015.

Student Travel Award, Shanks Workshop, Vanderbilt University, 2015.

Student Travel Award, SEARCDE, University of Memphis, 2014.

Student Travel Award, NSF-CBMS Regional Research Conference, Oklahoma State University, Stillwater, OK, 2014.

Math Graduate Student Travel Fund, Virginia Tech, Blacksburg, VA, 2014.

Student Travel Award, CNA Summer School, CMU, Pittsburgh, PA, 2013.

Student Travel Award, SEARCDE, Wake Forest University, Winston-Salem, NC, 2012.

Talks, Conferences, and Summer Schools

- Oct 2025, 10th SIAM Central States Section Annual Meeting, University of Arkansas, Fayetteville, AR.
(invited minisymposium talk)
- Oct 2025, 3rd UNC Greensboro PDE Conference, virtual. (contributed talk)
- Mar 2025, AMS Meeting Southeast Atlantic Region, Clemson University, SC. (invited minisymposium talk)
- Nov 2024, Department of Mathematics and Statistics, Loyola University Chicago. (*colloquium talk*)
- Oct 2024, 9th SIAM Central States Section Annual Meeting, University of Missouri Kansas City, MO.
(invited minisymposium talk)
- Oct 2023, 8th SIAM Central States Section Annual Meeting, University of Nebraska, Lincoln, NE. (*invited minisymposium talk*)
- June 2023, 2nd UNC Greensboro PDE Conference of 2023, virtual. (*contributed talk*)

- Oct 2022, 7th SIAM Central States Section Annual Meeting, Oklahoma State University, Stillwater, OK.
(contributed talk & chair)
- April 2022, Ohio River Analysis Meeting (ORAM), University of Kentucky, Lexington, KY. *(contributed talk)*
- Oct 2021, Midwest Numerical Analysis Day, Missouri S&T, Rolla, MO. *(invited section talk)*
- July 2021, 1st UNC Greensboro PDE Conference of 2021, virtual. *(contributed talk)*
- Aug 2020, International symposium on multi-model sensing and information processing, Xidian University, China, virtual. *(invited minisymposium talk)*
- Oct 2019, SIAM Central States Section Meeting, Iowa State University, Ames, IA. *(invited minisymposium talk)*
- Oct 2019, Data Science Practitioners Course - Instructor Workshp, IBM Skills Academy, T.J. Watson Research Center, Yorktown Heights, NY.
- Apr 2019, Quantitative Reasoning (QR) Professional Workshop, Columbus State Community College, Columbus, OH.
- May 2018, International Conference on Mathematics and Statistics, University of Memphis, Memphis, TN. *(invited section talk)*
- Mar 2018, Ohio River Analysis Meeting (ORAM), University of Kentucky, Lexington, KY. *(contributed talk)*
- Feb 2017, Wilkes University, Wiles-Barre, PA. *(invited talk)*
- Jan 2017, JMM, AMS sectional meeting, Atlanta, GA. *(section talk)*
- Nov 2016, The Southeastern-Atlantic Regional Conference on Differential Equations (SEARCDE), Florida Gulf Coast University, Ft. Myers, FL. *(section talk)*
- Sep 2016, SIAM Central States Section Meeting, University of Arkansas, Little Rock, AR. *(invited minisymposium talk)*
- Mar 2016, SIAM Southeastern Atlantic Section Conference, University of Georgia, Athens, GA. *(invited minisymposium talk)*
- Dec 2015, SIAM Conference of Analysis on PDE, Scottsdale, AZ. *(contributed talk & chair)*
- Nov 2015, Fall Fluid Mechanics Symposium, Virginia Tech (talk).
- Oct 2015, The Southeastern-Atlantic Regional Conference on Differential Equations (SEARCDE), University of North Carolina Greensboro, NC. *(contributed talk)*
- Jun 2015, 6th Symposium on Analysis and PDEs, Purdue University, West Lafayette, IN.
- Mar 2015, Shanks Workshop on Mathematical Aspects of Fluid Dynamics, Vanderbilt University, Nashville, TN. *(poster)*
- Oct 2014, The Southeastern-Atlantic Regional Conference on Differential Equations (SEARCDE), University of Memphis, Memphis, TN. *(section talk)*
- Sep 2014, SIAM Student Chapter Seminar, Virginia Tech, Blacksburg, VA. *(student talk)*
- Jul 2014, NSF-CBMS Regional Research Conference in the Mathematical Sciences: Problems of PDEs Related to Fluids, Oklahoma State University, Stillwater, OK.

Apr 2014, Applied Math Seminar, Department of Math, Virginia Tech. (*talk*)

Mar 2014, AMS Southeastern Spring Sectional Meeting, University of Tennessee, Knoxville, TN. (*contributed talk*)

May–Jun 2013, CNA Summer School, Topics in Nonlinear PDEs and Calculus of Variations, and Applications in Materials Science, Carnegie Mellon University.

Oct 2012, The Southeastern-Atlantic Regional Conference on Differential Equations (SEARCDE), Wake Forest University, Winston-Salem, NC. (*contributed talk*)

Programming Skills

Numerical ODE, finite-difference of numerical PDE, MCMC.

Softwares: L^AT_EX, Matlab, Mathematica, R, SAS, Tableau

Professional Societies

American Mathematical Society (AMS)

Society of Industrial and Applied Mathematics (SIAM)

American Statistical Association (ASA)