

Robert Dolan

Curriculum Vitae



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Education

- Expected **PhD**, *University of Connecticut*, Mathematics.
2020 Thesis Advisor: Jeffrey Connors
- 2016 **MS**, *University of Connecticut*, Mathematics.
- 2015 **BA**, *Western Connecticut State University*, Mathematics.

Research Interests

Numerical Algorithms for Fluid-Fluid Interactions, Numerical Methods for Partial Differential Equations, Numerical Analysis, The Finite Element Method, and Post-Secondary Education.

Employment

- Fall 2018- **Adjunct Faculty**, *Central Connecticut State University*.
- Fall 2017- **Adjunct Faculty**, *Western Connecticut State University*.
- Fall 2015- **Instructor/Teaching Assistant**, *University of Connecticut*.
- 2013-2014 **Teaching Assistant**, *Western Connecticut State University*.
- 2014-2015 **Math Clinic Tutor**, *Western Connecticut State University*.
- 2012-2015 **Private Tutor**, *Western Connecticut State University*.

Teaching Experience

Below the following abbreviations are used: PI=Primary Instructor and TA=Teaching Assistant. Multiple sections taught is indicated next to the course name.

University of Connecticut

○ Undergraduate Courses

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|-------------|---|-------------|
| ■ Math 1020 | <i>Problem Solving (2)</i> PI | Fall 2019 |
| ■ Math 1071 | <i>Business Calculus (Online)</i> PI | Summer 2019 |
| ■ Math 1020 | <i>Problem Solving (2)</i> PI | Spring 2019 |
| ■ Math 1071 | <i>Business Calculus (2)</i> PI | Fall 2018 |
| ■ Math 2110 | <i>Multivariable Calculus (Online)</i> TA | Summer 2018 |
| ■ Math 1071 | <i>Business Calculus (2)</i> PI | Spring 2018 |
| ■ Math 1020 | <i>Problem Solving (2)</i> PI | Fall 2017 |
| ■ Math 1071 | <i>Business Calculus (Online)</i> TA | Summer 2017 |
| ■ Math 2110 | <i>Multivariable Calculus (2)</i> TA | Spring 2017 |
| ■ Math 2110 | <i>Multivariable Calculus (2)</i> TA | Fall 2016 |

- Math 1131 *Calculus I* PI Summer 2016
- Math 1132 *Calculus II (2)* TA Spring 2016
- Math 1131 *Calculus I (2)* TA Fall 2016

Central Connecticut State University

○ Undergraduate Courses

- Math 103 *College Algebra* PI Fall 2019
- Math 103 *College Algebra* PI Fall 2018

Western Connecticut State University

○ Undergraduate Courses

- MAT 110 *Great Ideas in Mathematics* PI Fall 2017
- PHY 121 *General Physics II* TA Spring 2014
- MAT 100 *Intermediate Mathematics* TA Spring 2013

Publications

- 1 **Stability of two conservative, high-order fluid-fluid coupling methods**, *with Jeffrey Connors*.
Advances in Applied Mathematics and Mechanics, Vol. 11, No. 6, pp. 1-52, 2019.

Invited Talks

- May 2019 *High-Order Fluid-Fluid Coupling Methods, Time Filters & Predictive Accuracy Conference, University of Pittsburgh.*

Contributed Talks

- November 2019 *Numerical Coupling Methods for Atmosphere-Ocean Interaction, Mathematics Continued Conference, University of Connecticut.*
- March 2019 *Flux Partitioning and Reconstruction Methods for Atmosphere-Ocean Interaction, University of Connecticut, General Exam.*
- January 2014 *M-Band Wavelet-Based Audio Watermarking Algorithm, AMS Joint Mathematics Meetings.*
- August 2013 *M-Band Wavelet-Based Audio Watermarking Algorithm, MAA MathFest.*

Honors & Awards

- Fall 2019 **Predocctoral Fellowship, UCONN.**
- Fall 2019 **Doctoral Student Travel Fellowship, UCONN.**
- Summer 2019 **Summer Graduate Research Fellowship, UCONN.**
- 2015 - 2019 **Provost Recognition of Excellence in Teaching, UCONN.**
- 2014 & 2015 **Gloria Brunell Mathematics Award, WCSU.**
- 2015 **Sigma Xi Poster Presentation Award, Sigma Xi Northeastern Regional Conference.**

2014 **Provost Research Award, WCSU.**

2013 **MAA Outstanding Presentation Award, MAA MathFest.**

Service

- Fall 2019- *Society for Industrial & Applied Mathematics (SIAM)*, Vice President of the UCONN Chapter of SIAM.
- May 2019 *Sigma Xi Award Committee*, Invited to be on the Sigma Xi Research Award committee (WCSU).
- May 2019 *Western Research Day Judge*, Invited to serve as a judge for the undergraduate research presentations given at Western Research Day (WCSU).
- Fall 2018 *New T.A. Orientation*, Participated on a panel addressing new T.A. teaching concerns and advice (UCONN).
- Spring 2018 *AMS's "Who Wants to Be a Mathematician"*, Gave an opening talk to the contestants and faculty (WCSU).
- Fall 2015 *Directed Reading Program mentor*, The Directed Reading Program is a program in which undergraduate students are paired with graduate student mentors for semester-long independent study projects (UCONN).

Technology

- *Coding*, MATLAB, FreeFEM++, Maple, Visual Basic, and Excel.
- *Blackboard/WebAssign/MyMathLab/WileyPLUS*, Various online homework platforms.
- *Piazza Discussion Board*, Piazza is an online discussion board geared towards STEM subjects.
- *Other*, Extensive use of Latex, Minitab, and TI Nspire Calculators and Navigator system.

References

- Jeffrey Connors, University of Connecticut, jeffrey.connors@uconn.edu.
- Vasileios Chousionis, University of Connecticut, vasileios.chousionis@uconn.edu.
- Guozhen Lu, University of Connecticut, guozhen.lu@uconn.edu.
- Yung-Sze Choi, University of Connecticut, choi@math.uconn.edu.
- Myron Minn-Thu-Aye, University of Connecticut, myron.minn-thu-aye@uconn.edu (teaching).
- Anthony Rizzie, University of Connecticut, anthony.rizzie@uconn.edu (teaching).
- Stavros Christofi, Western Connecticut State University, christofis@wcsu.edu (teaching).