Jason Turner

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EDUCATION

UNIVERSITY OF WISCONSIN - MADISON | Ph.D. in Mathematics
Expected May 2023 | Madison, WI

UNION COLLEGE | B.Sc. in Mathematics and Physics
June 2018 | Schenectady, NY

RESEARCH PROJECTS

IMPLEMENTATION OF A MULTI-MODEL ENSEMBLE FOR CLIMATE FORECASTING
Stechmann, S., & Turner, J.
November 2018 - Present

PARALLELIZATION LIBRARY FOR GEOPHYSICAL FLUID DYNAMICS CODE
Stechmann, S. & Turner, J.
September 2018 - Present

STATISTICAL ANALYSIS OF RICHTMYER-MESHKOV INSTABILITIES
Canfield, J., Flynn, P., Saenz, J., & Turner, J.
June 2018 - August 2018

SIMULATION OF ELEMENTARY FLUID FLOWS
LaBrake, S., & Turner, J.
January 2018 - June 2018

PERSISTENT HOMOLOGICAL ANALYSIS OF BUCKYBALL® ARRANGEMENTS
Gasparovic, E., Johnson, B., Mann, N., Turner, J., & Yang, C.
September 2017 - March 2018

GENERALIZATIONS OF COLLATZ FUNCTIONS
Alvarado, A., Ceja Ayala, R., Knutsen, E., & Turner, J.
June 2017 - August 2017

CONSTRUCTION OF A QUANTUM OPTICAL SETUP
Laugharn, A., Seyfollah, M., & Turner, Jason
June 2016 – May 2017

HURRICANE LINKS
Johnson, B., & Turner, J.
November 2015 - May 2017

PHASE TRANSITIONS OF NANO-CONFINED ALCOHOLS
Amanuel, S., & Turner, J.
March 2015 - June 2016

TEACHING

TEACHING ASSISTANT | University of Wisconsin - Madison Department of Mathematics
MATH 221 - Calculus and Analytic Geometry 1 .... Spring 2019
MATH 221 - Calculus and Analytic Geometry 1 .... Autumn 2018

COURSE ASSISTANT | Union College Department of Mathematics
MTH 101 - Calculus 1: Differential Calculus .... Autumn 2017
MTH 102 - Calculus 2: Integral Calculus .... Winter 2018

COMMUNITY OUTREACH

STUDENT REPRESENTATIVE
Union College Committee on LGBTQ+ Affairs
April 2016 - June 2018 | Schenectady, NY

CHAPTER PRESIDENT
Union College Society of Physics Students
January 2015 - June 2018 | Schenectady, NY

TREASURER & PUBLIC EDUCATOR
Union College - Union Pride
October 2014 - June 2018 | Schenectady, NY

SECRETARY & OUTREACH COORDINATOR
Union College - Virtual U
October 2014 - June 2017 | Schenectady, NY

ACHIEVEMENTS AND FELLOWSHIPS

FELLOWSHIPS
Department of Energy Computational Science Graduate Fellowship 2019

AWARDS
George H. Catlin (1867) Prize 2018
Martin Terry Resch Prize 2018
Professor Frank Titus Memorial Prize in Physics 2018
Dean's List 2015, 2016, 2017, 2018
James Henry Turnbull (1929) Prize 2016

SOCIETIES
Omicron Delta Kappa Honor Society 2017
Phi Beta Kappa Honor Society 2017
Pi Mu Epsilon Honor Society 2017
Sigma Pi Sigma Honor Society 2017

AFFILIATIONS
American Mathematical Society
American Physical Society
Society for Advancement of Chicanos/Hispanics and Native Americans in Science
Alpha Phi Omega
Society of Physics Students

TALKS, WORKSHOPS, AND POSTER PRESENTATIONS

STATISTICAL ANALYSIS OF RICHTMYER-MESHKOV INSTABILITIES
Los Alamos 2018 Computational Physics Summer Workshop

PERSISTENT HOMOLOGY OF BUCKYBALL® CONFIGURATIONS
2018 Union College Steinmetz Day

THE DYNAMICS OF EVERYDAY FLUID FLOWS
2018 Union College Steinmetz Day

INTEGRATING FLUID DYNAMICS INTO THE UNDERGRADUATE CURRICULUM
2018 APS March Meeting

GENERALIZATIONS OF COLLATZ FUNCTIONS
Union College Undergraduate Math Seminar Series

INTRODUCTION TO LATEX: GENERAL USE AND RESUME WRITING
Winter 2018, Union College

GENERALIZATIONS OF COLLATZ FUNCTIONS TO GEOMETRIC ALGEBRAS
2017 APS New York State Sectional Autumn Meeting

ALLY TRAINER TRAINING: HOW TO EFFECTIVELY TEACH AND ENGAGE THE GREATER CAMPUS COMMUNITY
Autumn 2017, Union College

GENERALIZATIONS OF COLLATZ FUNCTIONS TO GEOMETRIC ALGEBRAS
2017 SACNAS

INTRODUCTION TO LATEX: GENERAL USE AND STEM WRITING
Autumn 2017, Union College

COLLATZ FUNCTIONS IN THE GAUSSIAN AND EISENSTEIN INTEGERS
2017 CSU Channel Islands REU Seminar Series

INTRODUCTION TO MATHEMATICA: THE BEST CLASSROOM CALCULATOR
Spring 2017, Union College

HURRICANE LINKS
2017 Union College Steinmetz Day

ALLY TRAINING: HOW TO BE AN EFFECTIVE ALLY TO THE LGBTQIA+ COMMUNITY
Spring 2017, Union College

HURRICANE LINKS
2017 Hudson River Undergraduate Math Conference

DEVELOPMENT OF A QUANTUM OPTICAL SETUP FOR SINGLE PHOTON EXPERIMENTS
2017 APS March Meeting

ALLY TRAINING: HOW TO BE AN EFFECTIVE ALLY TO THE LGBTQIA+ COMMUNITY
Autumn 2016, Union College

PHASE TRANSITIONS OF NANO-CONFINED ALCOHOLS
2016 Union College Steinmetz Day

PHASE TRANSITIONS OF NANO-CONFINED ALCOHOLS
2016 APS March Meeting

ALLY TRAINING: HOW TO BE AN EFFECTIVE ALLY TO THE LGBTQIA+ COMMUNITY
Winter 2016, Union College

MELTING BEHAVIOR OF NANO-CONFINED ALCOHOLS
2015 Union College Summer Research Seminar Series

SKILLS

COMPUTER SOFTWARE AND PROGRAMMING
Microsoft Excel, PowerPoint, and Word.
FORTRAN 95, MATLAB, Python, and Wolfram Mathematica.

LABORATORY MACHINES
Differential Scanning Calorimeter, and Optical Table.

LANGUAGES
English [Native] and Spanish [Proficient].