

Huy Dinh

CONTACT INFORMATION	Huy Dinh Department of Mathematics 155 S 1400 E RM 233 Salt Lake City, UT 84112-0090	hdinh@math.utah.edu math.utah.edu/~hdinh 801-581-7653
EDUCATION	Ph.D. Mathematics , University of Utah Advisor: Distinguished Professor Kenneth Golden Research Topics: simulations of floe scale dynamics in the polar sea ice pack, modeling anomalous diffusion in sea ice dynamics, numerical methods for nonlocal PDEs. M.S. Statistics , University of Utah Advisor: Assistant Professor Tom Alberts Research Topics: fractional Brownian motion (fBM), fractional autoregressive integrated moving average (fARIMA) time series, Continuous Time Random Walks (CTRWs), Hurst exponent estimation. B.S. Mathematics , University of Houston Minor: Physics Research Topics: mathematical image processing, applied algebraic topology, inverse problems, machine learning methods.	Expected May 2020 Expected August 2019 May 2014
EMPLOYMENT	Graduate Research and Teaching Assistant , University of Utah Undergraduate Research Assistant , University of Houston	August 2014–current Spring 2010–May 2014
HONORS AND AWARDS	NSF Graduate Research Fellowship Program Honorable Mention Travel Award to attend Joint Mathematics Meetings, Seattle, WA Travel Award to attend Pacific Institute for the Mathematical Sciences Conference on the Mathematics of Sea Ice, Vancouver, BC NSF Graduate Research Fellowship Program Honorable Mention Provost's Undergraduate Research Scholarship	2016 2016 2015 2015 2013
PUBLICATIONS	H. Dinh, E. Cherkaev, C. Strong and K. M. Golden, Floe scale model of anomalous diffusion in sea ice dynamics, in preparation, 2019. H. Dinh, H. Antil, Y. Chen, E. Cherkaev and A. Narayan, Model reduction for fractional elliptic problems using Kato's formula, <i>IMA Journal of Numerical Analysis</i> , submitted, 2019.	
CONFERENCES ATTENDED	Second SIAM Wasatch Student Chapters Conference, Logan, UT Joint Mathematics Meeting, Seattle, WA Mathematics Research Communities on Differential Equations, Probability and Sea Ice, Snowbird, UT Pacific Institute for the Mathematical Sciences Conference on the Mathematics of Sea Ice, Vancouver, BC 37th Annual Texas PDE Conference, Denton, TX Society for Neuroscience Annual Meeting, New Orleans, LA	April 2019 January 2016 June 2015 September 2015 March 2014 October 2012

PRESENTATIONS

Anomalous Diffusion in Sea Ice <i>Second SIAM Wasatch Student Chapters Conference, Utah State University</i>	April 2019
Eigenfaces, a Perspective on a Machine's Perspective <i>Applied Math Collective, University of Utah</i>	April 2019
Factorization of Functions <i>Applied Math Collective, University of Utah</i>	July 2018
Fractional Brownian Motion: Formulation and Applications <i>Applied Math Collective, University of Utah</i>	February 2018
Diffusion on Fractals <i>Graduate Student Colloquium, University of Utah</i>	February 2016
Vibration Suppression in Coupled Spring and Mass System (poster) <i>37th Annual Texas PDE Conference, University of North Texas</i>	March 2014
Vibration Suppression in Coupled Spring and Mass System (poster) <i>Undergraduate Research Day, University of Houston</i>	October 2013
Automated quantitative image analysis of voltage-gated Na ⁺ channels at the AIS (poster) <i>Society for Neuroscience Annual Meeting</i>	October 2012
Soma Detection and Persistent Homology (poster) <i>Spring Academic Showcase, University of Houston</i>	April 2013
Self-Assembled Nano-Patterns by Off-Normal Gas Cluster Ion Beam Bombardment for Biological Applications (poster) <i>Undergraduate Research Day, University of Houston</i>	October 2012

RESEARCH
MENTORING**Undergraduate students**

Jacqueline Rich (co-advised with Kenneth Golden)	Fall 2018
Research Topic: stochastic differential equation model of sea ice thickness	
Everest Fang (co-advised with Kenneth Golden)	Spring 2015 – Fall 2015
Research Topic: simulation of advective diffusion processes	

PROFESSIONAL
SERVICES AND
OUTREACH

University of Utah SIAM Student Chapter President	Fall 2014–Summer 2018
First SIAM Wasatch Student Chapters Conference, organizer <i>University of Utah</i>	April 2018
SIAM Student Chapter Interdepartmental BBQ, organizer <i>University of Utah</i>	June 2018
UU and Westminster COMAP Solutions Presentation, organizer <i>University of Utah</i>	February 2016
UU Graduate Alumni Panel, organizer <i>University of Utah</i>	October 2015
Outreach and Volunteering	
Peer Mentoring Program <i>University of Utah</i>	Fall 2018–Spring 2019
ACCESS Program for Women in Science and Mathematics Panel Member <i>ACCESS program, University of Utah</i>	Summer 2018
Math Demonstrations Table <i>Red, White and U Day, University of Utah</i>	Summer 2018
Superconducting Cable Demonstration <i>Physics Outreach, Harmony School of Technology- Houston</i>	December 2011
Physics Demonstrations <i>Physics Outreach, Quail Valley Middle School</i>	May 2011

COMPUTER SKILLS MatLab, Mathematica, R, Excel, HTML, Python, Git, C++, Java, Windows, Linux, L^AT_EX.

TEACHING EXPERIENCE	Instructor , University of Utah (full course responsibilities)	
	Math 3070: Applied Statistics I	Fall 2019
	Math 3150: Partial Differential Equations for Engineers	Summer 2019
	Math 1070: Introduction to Statistical Inference	Spring 2019
	Math 1070: Introduction to Statistical Inference	Fall 2018
	Math 3160: Applied Complex Variables	Summer 2018
	Math 1090: Business Algebra	Fall 2017
	Math 3160: Applied Complex Variables	Summer 2017
	Math 1060: Trigonometry	Spring 2017
	Math 1090: Business Algebra	Fall 2016
	Math 1090: Business Algebra	Spring 2016
	Substitute Teaching Lectures , University of Utah	
	Math 3140: Vector Calculus and PDEs, one lecture	Summer 2018
	Math 2210: Calculus III, two lectures	Spring 2018
	Math 5750/6880: Mathematics and Climate, one lecture	Fall 2017
	Math 1060: Trigonometry, one lecture	Spring 2017
	Math 2210: Calculus III, one lecture	Fall 2015
	Lab/Teaching Assistant , University of Utah	
	Math 2250: Differential Equation and Linear Algebra, Lab	Spring 2018
	Math 2210: Calculus III, TA	Fall 2015
	Math 1210: Calculus I, Lab	Spring 2015
	Math 2250: Differential Equation and Linear Algebra, Lab	Fall 2014