

# Huy Dinh

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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	<b>Ph.D. Mathematics</b> , University of Utah Advisor: Distinguished Professor Kenneth Golden Research Topics: simulations of floe scale dynamics in polar sea ice pack, anomalous diffusion in sea ice dynamics, numerical methods for nonlocal PDEs.  <b>M.St. Statistics</b> , 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>B.S. Mathematics</b> , University of Houston Minor: Physics Research Topics: Mathematical image processing, Applied algebraic topology, Inverse problems, Machine learning methods.	<b>Expected May 2020</b>     <b>Expected August 2019</b>     <b>May 2014</b>
EMPLOYMENT	<b>Graduate Research and Teaching Assistant</b> , University of Utah <b>Undergraduate Research Assistant</b> , University of Houston	<b>August 2014–current</b> <b>Spring 2010–May 2014</b>
HONORS AND AWARDS	NSF Graduate Research Fellowship Program Honorable Mention Travel Award to attend Joint Mathematics Meetings Travel Award to attend Pacific Institute for the Mathematical Sciences Conference on the Mathematics of Sea Ice NSF Graduate Research Fellowship Program Honorable Mention Provost's Undergraduate Research Scholarship	<b>2016</b> <b>2016</b> <b>2015</b> <b>2015</b> <b>2013</b>
PUBLICATIONS	H. Dinh, K. M. Golden, E. Cherkaev and C. Strong. 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)	
ATTENDED CONFERENCES	Second SIAM Wasatch Student Chapters Conference Joint Mathematics Meeting Mathematics Research Communities on Differential Equations, Probability and Sea Ice Pacific Institute for the Mathematical Sciences Conference on the Mathematics of Sea Ice 37th Annual Texas PDE Conference Society for Neuroscience Annual Meeting	<b>April 2019</b> <b>January 2016</b>  <b>June 2015</b> <b>September 2015</b> <b>March 2014</b> <b>October 2012</b>

## PRESENTATIONS

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

RESEARCH  
MENTORING**Undergraduate students**

Jacqueline Rich (co-advised with Kenneth M. Golden) Research Topic: Stochastic simulations of sea ice thickness	<b>Fall 2018</b>
Everest Fang (co-advised with Kenneth M. Golden) Research Topic: Stochastic simulations of ice floe trajectories	<b>Spring 2015 – Fall 2015</b>

PROFESSIONAL  
SERVICES AND  
OUTREACH

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

Physics Demonstrations <i>Physics Outreach, Quail Valley Middle School</i>	May 2011
Boat Attendant <i>UH Cardboard Boat Regatta, University of Houston</i>	April 2011

COMPUTER SKILLS    $\LaTeX$ , MatLab, Mathematica, R, Excel, HTML, Python, Git, C++, Java, Windows, Linux.

TEACHING EXPERIENCE	<b>Instructor</b> , University of Utah	
	Math 3070: Applied Statistics I	Fall 2019
	Math 3150: Partial Differential Equation 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
	<b>Substitute Teaching Lectures</b> , 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
	<b>Lab/Teaching Assistant</b> , 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

FEATURED ARTICLES   [UH Putnam Team Ranked 87th out of 578 Teams from U.S./Canadian Institutions](#)