

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 | Ph.D. Applied Mathematics , University of Utah Advisor: Professor Kenneth M. Golden Research Topics: simulations of floe scale dynamics, anomalous diffusion in sea ice, fractional diffusion equations, numerical methods for nonlocal PDEs M.S. Statistics , University of Utah Advisor: Professor Tom Alberts Research Topics: fractional Brownian motion (fBM), autoregressive integrated moving average (fARIMA), 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 Travel Award to attend PIMS Conference on the Mathematics of Sea Ice NSF Graduate Research Fellowship Program Honorable Mention Provost's Undergraduate Research Scholarship | 2016 2016 2015 2015 2013 |
| SUBMITTED PUBLICATIONS | 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> (2019) H. Dinh, D. Jimenez, M. Papadakis, F. Laezza, D. Labate. "Automated quantitative analysis of confocal images of neuronal network cultures." <i>The 2013 International Symposium on Biomedical Imaging: From Nano to Macro, San Francisco, CA, USA, 8-11, 2013</i> (2013) | |
| ATTENDED CONFERENCES | Second SIAM Wasatch Student Chapters Conference Joint Mathematics Meeting MRC on Differential Equations, Probability and Sea Ice PIMS Conference on the Mathematics of Sea Ice 37th Annual Texas PDE Conference Society for Neuroscience Annual Meeting | April 2019 January 2016 June 2015 September 2015 March 2014 October 2012 |

PRESENTATIONS

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

MENTORING

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| Graduate students | |
| Rebecca Hardenbrook | Fall 2018–Spring 2019 |
| Sean Groathouse | Fall 2018–Spring 2019 |
| Undergraduate students | |
| Jacqueline Rich (co-advised with Kenneth M. Golden) | Fall 2018 |
| Everest Fang (co-advised with Kenneth M. Golden) | Summer 2015 |

PROFESSIONAL
SERVICES AND
OUTREACH

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| University of Utah SIAM Student Chapter President | Fall 2014–Summer 2018 |
| organized the First SIAM Wasatch Student Chapters Conference | |
| <i>University of Utah</i> | April 2018 |
| organized SIAM SC Interdepartmental BBQ | |
| <i>University of Utah</i> | June 2018 |
| organized UU and Westminster COMAP Solutions Presentation | |
| <i>University of Utah</i> | February 2016 |
| organized UU Graduate Alumni Panel | |
| <i>University of Utah</i> | October 2015 |
| Outreach and Volunteering | |
| ACCESS 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 |

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| 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.

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| TEACHING EXPERIENCE | Lecturer , 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 |
| | Invited 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 |

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