

DORSA GHOREISHI

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EDUCATION

Ph.D., Mathematics

May 2020

University of Missouri, Columbia, MO

- Dissertation: *Phase Retrieval with Projections*
- Advisor: Dr. Peter Casazza

M.A., Mathematics

May 2019

University of Missouri, Columbia, MO

- Thesis: *Weak Phase Retrieval and Phaseless Reconstruction*

B.S., Applied Mathematics

May 2014

K.N.Toosi University of Technology, Tehran, Iran

EXPERIENCE

Graduate Research Assistant

August 2015 - Present

University of Missouri, Columbia, MO

- Present an innovative approach to define phases in matrix forms which leads to find new methods in phase retrieval
- Collaborate with members of Frame Research Center to create a new area in phase retrieval called weak phase retrieval which opened a new field of research
- Adapt different methods in geometry and convex bodies to study many problems in norm retrieval
- Provide a complete classification of norm retrieval and phase retrieval to make it more accessible for applications in different fields

Graduate Teaching Assistant

August 2015 - Present

University of Missouri, Columbia, MO

- Experience teaching and instructing different courses including Differential Equations, Calc I, Calc II, Calc III, Calculus for Social Sciences and College Algebra both as a teaching assistant and a main instructor. Each semester more than 60 students
- Design, write and implement curriculum for calculus courses. Supervise and coordinate recitation instructors
- Construct and manage online courses for summer classes

Graduate Student Mentor

August 2017 - Present

University of Missouri, MO

- Observe graduate teaching assistants to evaluate their teaching skills
- Provide teaching strategies, communication skills development and use of technology in teaching

Undergraduate Research Mentor

June 2019 - Present

University of Missouri, MO

- Introducing a project to an undergraduate student and guiding them through research by discussing their step by step progress and providing background information

Academic Tutor

June 2018 - August 2018

Mizzou Made Academic Tutoring, Columbia, MO

- Mathematics and Statistics tutor for athletic students in both private and group sessions

GRANTS AND AWARDS

- Dissertation Research Travel Award, October 2019, University of Missouri
- Graduate Professional Council Travel Award, September 2019, University of Missouri
- AMS Travel Grant, September 2019
- Excellence in Teaching Award, May 2018, University of Missouri
- Certificate of Recognition for Outstanding GPA, May 2013, K.N.Toosi University of Technology

PUBLICATIONS

1. Casazza, P.G., Ghereishi, D., *Phase Retrieval by Projections. (in preperation)*
2. Ghereishi, D., Valettas, P., *Invertibility and robustness of phase retrieval. (in preperation)*
3. Casazza, P.G., Ghereishi, D., Jose, S. and Tremain, J.C., 2017. *Norm retrieval and phase retrieval by projections.* Axioms, 6(1), p.6.
4. Botello-Andrade, S., Casazza, P.G., Ghereishi, D., Jose, S. and Tremain, J.C., 2016. *Weak phase retrieval and phaseless reconstruction.* arXiv preprint arXiv:1612.08018.
5. Botello-Andrade, S., Casazza, P.G., Ghereishi, D., Jose, S. and Tremain, J.C., 2017. *Weak Phase Retrieval.* In Compressed Sensing and its Applications (pp. 221-234). Birkhuser, Cham.

SERVICES

- Graduate Analysis Seminar organizer, August 2019- present, University of Missouri
- President and one term vice president of the AWM Student Chapter, August 2018 - May 2020, University of Missouri
- Vice president of the AMS Student Chapter, August 2017 - May 2019, University of Missouri
- Active member of the Graduate Professional Council, University of Missouri

CONFERENCES, TALKS AND WORKSHOP PARTICIPATIONS

- Talks
 - "Phase Retrieval", September 2019, 43rd annual meeting of the SIAM-SEAS Southeastern Atlantic Section, University of Tennessee-Knoxville, TN
 - "Weak Phase Retrieval and Phaseless Reconstruction", April 2019, 7th Women in Mathematics Symposium, University of Iowa, IA
 - "Introduction to Frame Theory" at the Analysis Seminar, May 2018, University of Missouri
 - "Phase Retrieval" at the AMS Student Chapter Seminar, April 2017, University of Missouri
 - "Weak Phase Retrieval" at the Graduate Analysis Seminar, October 2016, University of Missouri
- Attended Workshops
 - 43rd annual meeting of the SIAM-SEAS Southeastern Atlantic Section, University of Tennessee-Knoxville, TN
 - Analysis in Missouri: a Midwestern Symposium, September 2019, University of Missouri, MO
 - Spring Opportunities Workshop, April 2019, American Institute of Mathematics, San Jose, CA
 - 7th Women in Mathematics Symposium, April 2019, University of Iowa, IA
 - 7th International Conference on Computational Harmonic Analysis in conjunction with the 33rd annual Shanks Lecture, May 2018, Vanderbilt University, TN
 - 6th Midwest Women in Mathematics Symposium, April 2018, Purdue University, IN
 - NSF Decoding Science Communication and Training Program, August 2017, University of Missouri, MO
 - NSF/CBMS Conference on Sparse Approximation and Signal Recovery Algorithms, May 2017, New Mexico State University, NM