

**Curriculum Vitae**  
**ANNA R. GHAZARYAN**

*Department of Mathematics, Miami University*  
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**EDUCATION:**

2005 Ph.D. in Mathematics	<b>Ohio State University</b> , Columbus, OH
1996 M.S. in Earthquake Engineering	<b>American University of Armenia</b> , Yerevan, Armenia
1994 M.S. (Candidate of Sciences) in Mathematics	<b>Yerevan State University</b> , Yerevan, Armenia
1990 B.S. in Mathematics	<b>Yerevan State University</b> , Yerevan, Armenia

**WORK EXPERIENCE:**

*2022- present:* Chair, Department of Mathematics, Miami University, Oxford, OH.

*2021- present:* Professor, Department of Mathematics, Miami University, Oxford, OH.

*2016- 2021:* Associate Professor, Department of Mathematics, Miami University, Oxford, OH.

*2010 - 2016:* Assistant Professor, Department of Mathematics, Miami University, Oxford, OH.

*2008 - 2010:* Robert D. Adams Visiting Assistant Professor, Department of Mathematics, University of Kansas, Lawrence, KS.

*2005 - 2008:* Postdoctoral Research Fellow, Department of Mathematics, University of North Carolina, Chapel Hill, NC.

*August 2006 - December 2006:* Visiting Lecturer, Department of Mathematics, North Carolina State University, Raleigh, NC.

**GRANTS AND AWARDS**

**Grants and Awards: \$10,000 or more**

- NSF Grant DMS-1919555 to organize Fall 2019 Mathematics Conference: Differential Equations and Dynamical Systems, DMS-1603812, \$11,552.
- Miami Faculty Research (CFR) Grant, 2019: Summer Research Appointment; Research Graduate Assistantship for one student for 2019/2020.
- NSF Grant DMS-1603812 to organize Fall 2016 Mathematics Conference: Differential Equations and Dynamical Systems, DMS-1603812, \$10,000.
- NSF Research Grant DMS-1311313. \$105,524. 08.15.2013 - 07.31.2016. *On three different manifestations of instability of fronts in parabolic and partially parabolic systems.*
- Collaboration Grant for Mathematicians from Simons Foundation \$35,000. Duration 09/1/2012 -08/31/2017. Project title: Traveling waves in nonlinear coupled systems.
- Miami Faculty Research (CFR) Grant, 2011: Summer Research Appointment; Research Graduate Assistantship for one student for 2011/2012.
- NSF Research Grant DMS-0908009. \$63,087. 07.07.2009 - 30.06.2011. *Traveling Fronts with Unstable Continuous Spectrum: Geometric Structure and Nonlinear Stability Properties.*

## Grants and Awards: under \$10,000

- AWM-NSF Travel Grant, \$2296, to participate in SIAM conference on Applications of Dynamical Systems in Snowbird, Utah, 05/19/2019 - 05/23/2019.
- NSF Travel Grant to attend Oberwolfach Workshop on Dynamics of Patterns, Oberwolfach, Germany, 12/16 - 12/22, 2012, \$450.
- CELTUA (Center for Teaching Excellence) Grant: Major Teaching Project for Departments/Programs. Title: Enhancing teaching and learning in MTH245: Differential Equations for Engineers, Miami University, 2012.
- NSF Travel Grant to attend the conference on Symmetries of Differential Equations: Frames, Invariants and Applications, Minneapolis, MN, May 17-20, 2012.
- Dean's Award, School of Arts and Sciences, Miami University - Summer 2012.
- Research Assistantship for a Master's Student that includes paid tuition and a stipend for Academic Year 2011/2012.
- NSF Travel Grant to attend the 1st PRIMA Congress, Sydney, Australia, July 2009.
- AWM Travel Grant to attend SIAM Annual Meeting, San Diego, CA 2008.
- AWM Travel Grant to attend the workshop *Women in Mathematics: The Legacy of Ladyzhenskaya and Oleinik*, Berkeley, CA, 2006.
- AWM Travel Grant to attend SIAM Annual Meeting, New Orleans, LA, 2005.
- AWM Travel Grant to attend the workshop *Career Options for Women in Mathematical Sciences*, Minneapolis, MN, 2005.

## PEER-REVIEWED RESEARCH PUBLICATIONS:

1. M. Bakhshi, A. Ghazaryan, V. Manukian, N. Rodriguez. Traveling wave solutions in a model for social outbursts in a tension-inhibitive regime. *Studies in Applied Mathematics*. **147:2** (2021), 650–674.
2. A. Ghazaryan, S. Lafortune, C. Linhart. *Flame propagation in a porous medium*. *Physica D: Nonlinear Phenomena* **413** (2020), Article 132653.
3. A. Ghazaryan, S. Lafortune, V. Manukian. *Spectral Analysis of Fronts in a Marangoni-Driven Thin Liquid Film Flow Down a Slope*. *SIAM J. on Applied Mathematics*, **80(1)** (2020), 95–118.
4. H. Cai, A. Ghazaryan, V. Manukian. *Fisher-KPP dynamics in diffusive Rosenzweig-MacArthur and Holling-Tanner models*. *Math. Model. Nat. Phenom.* **14:4** (2019). Special issue: Singular perturbations and multiscale systems.
5. A. Ghazaryan, Y. Latushkin, X. Yang. *Stability of a planar front in a multidimensional reaction-diffusion system*. *SIAM J. on Math. Analysis* **50:5** (2018) 5569-5615.
6. A. Ghazaryan, Y. Latushkin, A. Pogan. *Spectrum of non-planar traveling waves*. *Integral Equations Operator Theory* **90:3** (2018) 20pp.
7. A. Ghazaryan, S. Lafortune, V. Manukian. *Stability of nonlinear waves and patterns and related topics*. *Philos. Trans. A Math. Phys. Eng. Sci.* 2018 Apr 13; 376(2117). pii: 20180001.
8. A. Ghazaryan, S. Lafortune, P. McLarnan. *Combustion waves in hydraulically resistant porous media in a special parameter regime*. *Physica D: Nonlinear Phenomena*, **332:1** (2016) 23–33.
9. A. Ghazaryan, S. Lafortune, V. Manukian. *Stability of front solutions in a model for a surfactant driven flow*. *Physica D: Nonlinear Phenomena*, **307:1** (2015) 1–13.

10. A. Ghazaryan, S. Lafortune, P. McLarnan. *Stability analysis for combustion fronts traveling in hydraulically resistant porous media.* SIAM J. on Applied Mathematics. **75:3** (2015) 1225–1244.
11. A. Ghazaryan, V. Manukian. *Coherent structures in a model for mussel-algae interaction.* SIAM J. on Dynamical Systems. **14:2**, (2015) 893–913.
12. A. Ghazaryan, V. Manukian, S. Schecter. *Traveling waves in Holling-Tanner model with diffusion.* Proceedings of the Royal Society of London A. <http://dx.doi.org/10.1098/rspa.2015.0045>.
13. A. Ghazaryan, Y. Latushkin, S. Schecter. *Stability of traveling waves in partly parabolic systems.* Mathematical Modeling of Natural Phenomena. **8:5** (2013) 32–48.
14. A. Ghazaryan, S. Schecter, P. Simon. *Gasless combustion fronts with heat loss.* SIAM J. on Applied Mathematics, **73** (3), 2013, 1303–1326.
15. A. Ghazaryan, J. Humpherys, J. Lytle. *Spectral behavior of combustion fronts with high exothermicity.* SIAM J. on Applied Mathematics, **73:1** (2013) 422–437.
16. A. Ghazaryan, C. K. R. T. Jones. *On the existence of high Lewis number combustion fronts.* J. of Mathematics and Computers in Simulation: "On Nonlinear Waves: Computation and Theory," **82** (2012) 1133-1141.
17. A. Ghazaryan, Y. Latushkin, S. Schecter. *Stability of traveling waves for degenerate systems of reaction-diffusion equations.* Indiana Univ. Math. J. **60** (2011) 443–472.
18. A. Ghazaryan, Y. Latushkin, S. Schecter. *Stability of traveling waves for a class of reaction-diffusion systems that arise in chemical reaction models.* SIAM J. Math. Anal. **42** (2010) 2434-2472.
19. A. Ghazaryan, Y. Latushkin, S. Schecter, A. J. De Souza. *Stability of traveling waves in a model for gasless combustion.* Archive for Rational Mechanics and Analysis **198** (2010) 981-1030.
20. A. Ghazaryan, P. Gordon, A. Virodov. *Stability of fronts and transient behavior in KPP systems.* Proc. Royal Society A **466** (2010), no. 2118, 1769-1788.
21. M. Beck, A. Ghazaryan, B. Sandstede. *Nonlinear convective stability of traveling fronts near Turing and Hopf instabilities.* J. of Differential Equations **246** (2009) 4371-4390.
22. A. Ghazaryan. *Nonlinear stability of high Lewis number combustion fronts.* Indiana University Math. J. **58** (2009) 181-212.
23. A. Ghazaryan, C. K. R. T. Jones. *On the stability of high Lewis number combustion fronts.* Discrete and Continuous Dynamical Systems **24** (2009) 809-826.
24. A. Ghazaryan. *On the convective nature of instability of a front undergoing a supercritical Turing bifurcation.* J. of Mathematics and Computers in Simulation: "On Nonlinear Waves: Computation and Theory" **80** (2009) 10-19.
25. A. Ghazaryan, P. Gordon. *The KPP type flame fronts in porous media.* Nonlinearity **21** (2008) 973-992.
26. A. Ghazaryan, P. Gordon, C. K. R. T. Jones. *Traveling waves in porous media combustion: uniqueness of waves for small thermal diffusivity.* J. of Dynamics and Differential Equations **19** (2007) 951-966.
27. A. Ghazaryan, B. Sandstede. *Nonlinear convective instability of Turing-unstable fronts near onset: A case study.* SIAM Journal on Applied Dynamical Systems **6** (2007) 319-347.

#### **OTHER PUBLICATIONS:**

1. A. Ghazaryan and N. Rodriguez. *Front Propagation in a Model for Civil Unrest.* SIAM NEWS, Nov 11, 2022. <https://sinews.siam.org/Details-Page/front-propagation-in-a-model-for-civil-unrest>.

2. A. Ghazaryan, R. Kuske, and E. Lawrence. *Almost 20 years of the AWM mentor network*. In the book *Fifty Years of Women in Mathematics Reminiscences, History, and Visions for the Future of AWM*, editors: J. Beery, S. Greenwald, and C. Kessel, Springer, 2021.
3. K. Burke, A. Ghazaryan, R. Marangell. *2020: The Editorial Transition*. Editorial. DSWeb. <https://dsweb.siam.org/The-Magazine/All-Issues/2018-the-editorial-transition>.
4. A. Ghazaryan. *Edward Fraenkel (1927-2019)*. DSWeb. <https://dsweb.siam.org/The-Magazine/All-Issues/edward-fraenkel-1927-2019>
5. D. Abrams, K. Burke, A. Ghazaryan, M. Porter. *2018: The Editorial Transition*. Editorial. DSWeb. <https://dsweb.siam.org/The-Magazine/All-Issues/2018-the-editorial-transition>.
6. PhD Thesis: *Nonlinear convective instability of fronts: A case study*. Adviser: Prof. B. Sandstede. [www.ohiolink.edu/etd/view.cgi?acc\\_num=osu1117552079](http://www.ohiolink.edu/etd/view.cgi?acc_num=osu1117552079), 2005.

#### **MASTER THESIS SUPERVISION:**

Priscilla Yinzime, 2023 (expected).

Obed Domson, 2021.

Gabriel Preston, 2021.

William Ofori-Atta, 2019.

Steven Collar, 2018.

Son Van, 2015.

Peter McLarnan, 2013.

#### **UNDERGRADUATE RESEARCH:**

##### **Faculty advisor for Miami University Undergraduate Research Proposal Awards:**

- Fall 2016. Benard Neuhaus.  
Project Title: A Mathematical Analysis of the Equilibria of Mussel Populations.
- Spring 2015. Team: Changrui Liu and Stephen Colegate.  
Project Title: Mathematical Models for the Dynamics of Tobacco and Alcohol Use.
- Spring 2015. Team: Robert Doughty and Eli Thompson.  
Project Title: Analysis of the Dynamics of Malaria Transmission.

##### **Research Adviser for Undergraduate Student Publications:**

1. Stephen Colegate and Charlie Liu. Mathematical Modeling of drug use: the dynamics of mono-substance dependence for two addictive drugs. *Pi Mu Epsilon Journal*. Vol.14, No 7, 2017.
2. Robert Doughty and Eli Thompson. Mathematical Analysis of Ivermectin as a Malaria Control Method, *SIAM Undergraduate Research Online (SIURO)*, July 2016, <http://www.siam.org/students/siuro/published.php>.
3. Teng Zhang and Son Van. A study of a debt-influenced equilibrium of the Keen model. *Pi Mu Epsilon Journal*, v. 14, number 4, pp. 275 - 281, 2016.

##### **Publications with undergraduate (\*), masters (\*\*), students from Miami University:**

1. M. Bakhshi\*\*, A. Ghazaryan, V. Manukian, N. Rodriguez. Traveling wave solutions in a model for social outbursts in a tension-inhibitive regime. *Studies in Applied Mathematics*. **147:2** (2021), 650-674.

2. H. Cai\*, A. Ghazaryan, V. Manukian. *Fisher-KPP dynamics in diffusive Rosenzweig-MacArthur and Holling-Tanner models*. Math. Model. Nat. Phenom. **14:4** (2019). Special issue: Singular perturbations and multiscale systems.
3. A. Ghazaryan, S. Lafortune, P. McLarnan\*\*. *Combustion waves in hydraulically resistant porous media in a special parameter regime*. Physica D: Nonlinear Phenomena, **332:1** (2016) 23–33.
4. A. Ghazaryan, S. Lafortune, P. McLarnan\*\*. *Stability analysis for combustion fronts traveling in hydraulically resistant porous media*. SIAM J. on Applied Mathematics. **75:3** (2015) 1225–1244.

## SERVICE TO MIAMI UNIVERSITY

Graduate Director, Department of Mathematics, Miami University, August 2021-August 2022.

University Senate, August 2020 - May 2022.

Governance committee, College of Arts and Sciences, Spring 2021-May 2022.

University Student Appeals Board, Spring 2020-Fall 2021.

Committee on Faculty Research, Fall 2019-May 2022.

Affordable and Open Educational Resource Committee (AOERC), August 2019 - Fall 2021.

Organizer and director of the five-week long summer Study Abroad Programs: Math in Spain 2018, Math in Italy 2017, Math in London and Dublin 2016, Math in Berlin 2015, and Math in London 2014.

## PROFESSIONAL SERVICE

Editor for Applied Numerical Mathematics Journal, Elsevier, October 2022 - now.

Member of the organizing committee for One World Dynamics Seminar (<https://sites.google.com/view/oneworldddynamics/home>). Sep. 2021-March 2023.

NSF Applied Dynamical Systems Panel, 2022.

Applied Math CAREER Panel, 2022.

Member of the Scientific Program Committee for the 12th IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, to take place on Mar. 30-Apr. 1, 2022.

Student poster judge, SIAM Conference on Applications of Dynamical Systems. Remote meeting. May 23-27, 2021.

Member of 2019 Officer Nominating Committee for the SIAM Activity group on Dynamical Systems.

Member of the 2018 Selection Committee for the Martin Kruskal Lecture Award (SIAM Nonlinear Waves and Structures activity group).

Member of the Scientific Program Committee for the 11th IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Mar. 29-Apr. 1, 2019.

Secretary of the SIAM Activity group on Dynamical Systems (elective position). Jan. 2017- Dec. 2019.

Chief Editor of Dynamical Systems quarterly online magazine (DSWeb). Jan. 2017- Feb. 2019.

Editor for a thematic issue “Stability of nonlinear waves and patterns and related topics for Philosophical Transactions of the Royal Society A: Mathematical, Physical, and Engineering Sciences”, March 2018.

Member of the Scientific Program Committee for the Tenth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Mar. 29-Apr. 1, 2017.

Chair of AWM Mentor Network Committee, Aug. 2010 - July 2017. Reappointed in 2012 and 2014.  
Co-chair of AWM Mentor Network Committee, Nov. 2008 - Aug. 2010.

IMA NSF Review Panel, Sep. 2014.

Reviewer for Studies in Applied Mathematics (Wiley Periodicals, Inc.), SIAM Undergraduate Research Online (SIURO), International Journal of Mathematics and Mathematical Sciences, Applied Numerical Mathematics, Physica D: Nonlinear Phenomena; SIAM Journal on Dynamical Systems; Nonlinearity; SIAM Journal on Applied Mathematics; Journal of Differential Equations; SIAM Journal on Mathematical Analysis; Nonlinear Analysis: Theory, Methods & Applications; Applied Mathematical Modelling; Journal of Nonlinear Science; Texts in Biomathematics; Electronic Journal of Qualitative Theory of Differential Equations; Acta Applicandae Mathematicae; AMS Mathematical Reviews; Zentralblatt MATH.

Organizer of workshops and conferences:

1. Fall 2019 Mathematics Conference: Differential Equations and Dynamical Systems, Miami University, Oxford, OH, Sep 23-24, 2019.
2. BIRS Workshop Stability of Multidimensional Waves, Banff International Research Station, Banff, Canada, June 2 -9, 2019.
3. Fall 2016 Mathematics Conference: Differential Equations and Dynamical Systems, Miami University, Oxford, OH, Sep 23-24, 2016.
4. Conference *The Geometry and Analysis of Dynamical Systems*, North Carolina State University, Raleigh, NC, Feb. 2008, [www.math.ncsu.edu/GADS](http://www.math.ncsu.edu/GADS).

Organizer of minisymposia and special sessions:

1. Minisymposium *Existence and stability of traveling waves in nonlinear systems*. The 12th IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, to take place on Mar. 30-Apr. 1, 2022.
2. Minisymposium *Recent Developments in Pattern and Wave Formation: Theory and Applications - Part I - II*. SIAM Conference on Applications of Dynamical Systems, remote, May 23-27, 2021.
3. Minisymposium *Propagation of fronts and traveling waves in physics, chemistry, combustion, biological systems and related topics*. The 13th AIMS Conference on Dynamical Systems, Differential Equations and Applications, June 5-9, 2020, Atlanta, USA. (Postponed to June, 2021, because of COVID19).
4. Minisymposium *Recent developments in pattern and wave formation: theory and applications*. SIAM Conference on Nonlinear Waves and Coherent Structures (NWCS20), July 27- 30, 2020 (Cancelled because of COVID19).
5. Minisymposium *Existence and stability of nonlinear waves - Parts 1-2* 9th International Congress on Industrial and Applied Mathematics (ICIAM 2019), Valencia, Spain July 15-19, 2019
6. Minisymposium *Existence and stability of nonlinear waves: theory and numerics - Parts I-II*. SIAM Conference on Applications of Dynamical Systems, Snowbird, Utah, May 19-23, 2019.
7. Minisymposium *Stability and traveling waves - Parts I-IX*. 11th IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Mar. 29-Apr. 1, 2019.
8. Minisymposium *Existence and Stability of traveling waves- Parts I-III*. SIAM Conference on Nonlinear Waves and Coherent Structures, Anaheim-Orange County, Orange, CA, June 11-14, 2018.
9. Special Session (16 speakers) *Nonlinear Waves and Patterns* at AMS Spring Central Sectional Meeting, Ohio State University, Columbus, OH, Mar. 17-18, 2018.
10. Minisymposium *Waves and Patterns - Parts I and II*, SIAM Conference on Analysis of Partial Differential Equations, Baltimore, MD, Dec. 9-12, 2017.

11. Minisymposium *Recent Results on Traveling Waves in Systems of PDEs - Parts I and II*, SIAM Conference on Applications of Dynamical Systems, Snowbird, Utah, May 21-25, 2017.
12. Minisymposium *Wave Phenomena in Combustion- Parts I and II*, the Tenth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Mar. 29 - Apr. 1, 2017.
13. Special Session (12 speakers) *Nonlinear Waves: Analysis and Numerics* at AMS Spring Southeastern Sectional Meeting College of Charleston, Charleston, SC, Mar. 10-12, 2017.
14. Minisymposium *Existence and Stability of Nonlinear Waves and Patterns - Parts I - IV* at SIAM Conference on Nonlinear Waves and Coherent Structures, Philadelphia, PA, 8-11 Aug. 2016.
15. Minisymposium *Nonlinear Waves in Coupled Systems - Parts I and II* at the SIAM conference on Applications of Dynamical Systems, Snowbird, Utah, May 17-21, 2015.
16. Minisymposium on *Geometric Techniques in the Analysis of Traveling Waves*, the Ninth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, April 1-4, 2015.
17. Minisymposium on *Spectral and Geometric Methods in Stability of Waves and Patterns: Parts I-V*, SIAM Conference on Nonlinear Waves and Coherent Structures, Cambridge, UK, Aug. 11-14, 2014.
18. Minisymposium on *Traveling Waves and Patterns: Parts I-IV*, The 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Madrid, Spain, July 7 - 11, 2014.
19. Minisymposium *Existence and Stability of Traveling Wave Solutions* at the SIAM conference on Dynamical Systems, Snowbird, Utah, 2013.
20. Special Session on *Nonlinear Waves and Patterns* at AMS Central Fall Section Meeting, University of Akron, Akron, OH, October 20-21, 2012.
21. Special Session on *Mathematical Models for Upwelling Ocean Currents and Related Phenomena (12 speakers)* at the 9th AIMS conference on Dynamical Systems, Differential Equations and Applications, Orlando, FL, July 1-5, 2012.
22. Minisymposium *Existence and Stability of Nonlinear Waves in Coupled Systems: Parts I, II, III*, SIAM Conference on Applications of Dynamical Systems, 2011, Snowbird, UT.
23. Minisymposium *Recent Developments in Analysis of Traveling Waves: Theory and Applications - Parts I, II*, SIAM Conference on Nonlinear Waves and Coherent Structures, 2010, Philadelphia, PA.
24. Minisymposium *Stability of Traveling Waves, Parts I - IV*, Joint SIAM/RSME-SCM-SEMA Meeting on Emerging Topics in Dynamical Systems and Partial Differential Equations, Barcelona, Spain, 2010.
25. Minisymposium *Traveling Waves in Engineering Applications*, SIAM Conference on Nonlinear Waves and Coherent Structures, Rome, Italy, July 2008.
26. Minisymposium *Existence, Uniqueness and Stability of Combustion Wavefronts*, SIAM Conference on Application of Dynamical Systems, Snowbird, UT, May 2007.
27. Minisymposium *Various Aspects of the Stability of Traveling Waves*, SIAM Conference on Nonlinear Waves and Coherent Structures, Seattle, WA, Sep. 2006.
28. Minisymposium *Geometric Singular Perturbation Theory and Wave Phenomena*, SIAM Conference on Analysis of Partial Differential Equations, Boston, MA, July 2006.

## PRESENTATIONS:

1. SIAM Conference on Nonlinear Waves and Coherent Structures (NWCS22) Aug. 30 - Sep. 2, 2022 University of Bremen, Bremen, Germany. Hybrid meeting. Zoom Presentation.
2. The 12th IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, March 30- April 01, 2022, Athens, GA.

3. Oberwolfach Workshop on Dynamics of Waves and Patterns (hybrid meeting), remote presentation, Oberwolfach, Germany, August 8-14, 2021.
4. SIAM Conference on Applications of Dynamical Systems. Remote meeting. May 23-27, 2021.
5. Fall 2020 meeting of the Ohio Section of the MAA, October 23, 2020. Remote meeting. Plenary talk.
6. Analysis Seminar, University of Kansas, Lawrence, KS, May 13, 2020. Remote presentation.
7. SIAM Conference on Analysis of Partial Differential Equations, La Quinta, CA, Dec 11-14, 2019.
8. 9th International Congress on Industrial and Applied Mathematics (ICIAM 2019), Valencia, Spain, July 15-19, 2019.
9. SIAM Conference on Applications of Dynamical Systems, Snowbird, Utah, May 19-23, 2019.
10. 11th IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Mar. 29-Apr. 1, 2019.
11. AMS Fall Central Sectional Meeting, Ann Arbor, MI, October 20-21, 2018.
12. SIAM Conference on Nonlinear Waves and Coherent Structures, Anaheim-Orange County, Orange, CA, June 11-14, 2018.
13. KUMUNU PDE, Dynamical Systems and Applications, University of Kansas, Lawrence, Kansas, Apr. 21-22, 2018.
14. AMS Spring Central Sectional Meeting, Ohio State University, Columbus, OH, Mar. 17-18, 2018.
15. SIAM Conference on Analysis of Partial Differential Equations, Baltimore, MA, Dec 9-12, 2017.
16. BIRS Workshop at the Casa Matematica Oaxaca on Geometrical Methods, non Self-Adjoint Spectral Problems, and Stability of Periodic Structures, Oaxaca, Mexico, June 18-23, 2017.
17. SIAM Conference on Applications of Dynamical Systems, Snowbird, Utah, May 21-25, 2017.
18. KUMUNU Conference on PDE, Dynamical Systems and Applications 2017, University of Nebraska-Lincoln, April 21-23, 2017.
19. The Tenth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, March 29-April 1, 2017. Athens, GA.
20. AMS Spring Southeastern Sectional Meeting College of Charleston, Charleston, SC, Mar. 10-12, 2017.
21. PDE seminar, OSU, March 7, 2017.
22. SIAM Conference on Nonlinear Waves and Coherent Structures, Philadelphia, PA, 8-11 Aug. 2016.
23. 2016 John H. Barrett Memorial Lectures. University of Tennessee, 28-30 Apr. 2016.
24. KUMU PDE, Dynamical Systems and Applications, University of Missouri, Columbia, Missouri, Apr. 23-24, 2016.
25. SIAM conference on Analysis of Partial Differential Equations. Dec. 7-20, 2016.
26. Equadiff-2015, Lyon, France, July 6-10, 2015.
27. SIAM Conference on Applications of Dynamical Systems, Snowbird, Utah, May 17-21, 2015.
28. KUMU PDE, Dynamical Systems and Applications, University of Kansas, Lawrence, Kansas, Apr. 18-19, 2015.
29. The Ninth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, April 1-4, 2015.



30. AMS Spring Southeastern Sectional Meeting, Huntsville, AL, March 27-29, 2015.
31. AMS Central Spring Sectional Meeting, Michigan State University, East Lansing, MI, March 14-15, 2015.
32. SIAM Conference on Nonlinear Waves and Coherent Structures, Cambridge, UK, Aug. 11-14, 2014.
33. The 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Madrid, Spain, July 7 - 11, 2014.
34. Workshop on Stability of Solitary Waves, Centro di Ricerca Matematica Ennio De Giorgi, Pisa, Italy, May 26-30, 2014.
35. Colloquium, Cincinnati University, Department of Mathematical Sciences, Apr. 17, 2014.
36. SIAM Conference on Analysis of Partial Differential Equations, Orlando, FL, Dec. 7-10, 2013.
37. Stochastic Adaptive Control/Interdisciplinary Research Seminar & AWM Student Chapter Meeting, University of Kansas, Lawrence, KS, April 22, 2013.
38. Colloquium, Department of Mathematics, College of Charleston, Apr. 3-6, 2013.
39. The 8th IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, GA, Mar. 25-28, 2013
40. PDE and Applied Mathematics Seminar, University of Akron, Mar. 5-7, 2013.
41. Oberwolfach Workshop on Dynamics of Patterns, Oberwolfach, Germany, Dec. 16-22, 2012.
42. Seminar at the Department of Mathematics, University of Minnesota. Oct. 29, 2012.
43. AMS Central Fall Section Meeting, University of Akron, Akron, OH, Oct. 20-21, 2012.
44. SUMSRI (Summer Undergraduate Mathematics Research Institute) Colloquium, Miami University, 2012.
45. The 9th AIMS conference on Dynamical Systems, Differential Equations and Applications, July 1-5, 2012, Orlando, FL. (Two different talks.)
46. AMS Spring Central Section Meeting, Lawrence, KS, Mar. 30-Apr. 1, 2012.
47. Colloquium at the Department of Mathematics, Statistics and Computer Science, Marquette University, Milwaukee, WI, Oct. 2011.
48. Workshop on Localized Multi-Dimensional Patterns in Dissipative Systems: Theory, Modeling, and Experiments, Banff International Research Station for Mathematical Innovation and Discovery, Banff, Canada, July 2011.
49. SIAM Conference on Applications of Dynamical Systems, Snowbird, UT, May 2011.
50. 7th IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, GA, 2011.
51. SIAM Conference on Nonlinear Waves and Coherent Structures, Philadelphia, PA, Aug. 2010.
52. Joint SIAM/RSME-SCM-SEMA Meeting on Emerging Topics in Dynamical Systems and Partial Differential Equations, Barcelona, Spain, 2010.
53. 8th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Dresden University of Technology, Dresden, Germany, 2010. (Two different talks.)
54. Differential Equations Seminar, University of Missouri, Oct. 2009.
55. Seminar on Stochastic Analysis and Control, University of Kansas, Lawrence, KS, Oct. 2009.

56. Stochastic PDE Seminar, Brigham Young University, Provo, UT, Sep. 2009.
57. 1st Pacific Rim Mathematical Association (PRIMA) Congress, Sydney, Australia, July 2009.
58. SIAM Conference on Application of Dynamical Systems, Snowbird, Utah, May 2009.
59. 6th IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, GA, March 2009.
60. AMS Southeastern Section Meeting, Huntsville, AL, Oct. 2008.
61. SIAM Conference on Nonlinear Waves and Coherent Structures, Rome, Italy, July 2008.
62. AWM Workshop at SIAM Annual Meeting, San Diego, CA, July 2008.
63. SIAM Annual Meeting, San Diego, CA, July 2008.
64. Colloquium, Department of Mathematics, University of Alabama, Huntsville, AL, Feb. 2008.
65. Conference on the Geometry and Analysis of Dynamical Systems, North Carolina State University, Raleigh, NC, Feb. 2008.
66. SIAM Conference on Analysis of Partial Differential Equations, Mesa, AZ, Dec. 2007.
67. Differential Equation Seminar, North Carolina State University, Oct. 2007.
68. International Conference on Dynamical Methods and Mathematical Modeling, Valladolid, Spain, 2007.
69. Equadiff 07, Vienna, Austria, Aug. 2007.
70. SIAM Conference on Application of Dynamical Systems, Snowbird, Utah, May 2007.
71. Postdoctoral seminar, Mathematical Science Research Institute, Berkeley, CA, May 2007.
72. 5th IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, GA, Apr. 2007. *Nonlinear convective instability of fronts.*
73. Seminar, University of Kansas, Lawrence, KS, Apr. 11, 2007.
74. South Eastern Atlantic Mathematical Sciences Workshop, Charleston, SC, Sep. 2006.
75. SIAM Conference on Nonlinear Waves and Coherent Structures, Seattle, WA, Sep. 2006.
76. SIAM Conference on Analysis of Partial Differential Equations, Boston, MA, July 2006.
77. AMS Spring Central Sectional Meeting, Notre Dame, IN, Apr. 2006.
78. AWM Workshop, SIAM Annual Meeting, New Orleans, LA, July 2005.
79. Applied Mathematics Seminar, Ohio State University, Columbus, OH, Oct. 2004.

**PROFESSIONAL TRAINING AND EXPERIENCES:**

Oberwolfach Workshop on Dynamics of Waves and Patterns (hybrid meeting), Oberwolfach, Germany, August 8-14, 2021.

Informal Analysis Seminar, Kent State University, Kent OH. Nov. 9-10, 2019.

BIRS Focused Research Workshop on Stability of Multidimensional Waves, Banff International Research Station, Banff, Canada, June 2 -9, 2019.

BIRS Workshop at the Casa Matematica Oaxaca on Geometrical Methods, non Self-Adjoint Spectral Problems, and Stability of Periodic Structures, Oaxaca, Mexico, June18-23, 2017.

Oberwolfach Workshop on Dynamics of Patterns, Oberwolfach, Germany, Dec. 16 - 22, 2012.

IMA Annual Program *Infinite Dimensional and Stochastic Dynamical Systems and their Applications*, long-term visiting researcher, Sep.10 - Dec.10, 2012, Minneapolis, MN.

Workshop on *Localized Multi-Dimensional Patterns in Dissipative Systems: Theory, Modeling, and Experiments*, Banff International Research Station for Mathematical Innovation and Discovery, Banff, Canada, July 24 -July 29, 2011.

Workshop on *Ocean Ecologies and Their Physical Habitats in a Changing Climate*, Mathematical Biosciences Institute, Columbus, OH, June 20 - July 1, 2011.

Workshop on *Multidimensional Localized Structures*, University of Rome, Rome, Italy, July 18-19, 2008.

Workshop on *Stability of Nonlinear Waves*, University of Washington, Seattle, WA, Sep. 6-8, 2006.

Workshop on *Stability Criteria for Multi-Dimensional Waves and Patterns*, American Institute of Mathematics, Palo Alto, CA, May 16-20, 2005.

Workshop on *Career Options for Women in Mathematical Sciences*, Institute for Mathematics and its Applications, Minneapolis, MN, Feb. 4-5, 2005.

Semester-long VIGRE seminar series on *Professional Development*, Ohio State University, Columbus, OH, Spring 2003. Ohio State University, Columbus, OH, Winter 2003.

Career Workshop: *Connecting Women in Mathematical Sciences to Industry*, Institute for Mathematics and its Applications, Minneapolis, MN, Sep. 8-10, 2000.

**PROFESSIONAL MEMBERSHIPS:** American Mathematical Society (AMS); Society for Industrial and Applied Mathematics (SIAM); Association for Women in Mathematics (AWM).

**LANGUAGES:** Armenian (native), English (fluent), Russian (fluent), French (elementary level)

**APPENDIX: Courses taught at Miami University:**

Fall 2022 MTH 435/535 Mathematical Modeling Seminar.

Spring 2022: MTH 245 Differential Equations for Engineers, MTH 655 Advanced Differential Equations.

Fall 2021: MTH 347 Differential Equations (2 sections), MTH 253 Intro to Tech. Computing.

Summer 2021: MTH 347 Differential Equations, MTH 435/535 Mathematical Modeling Seminar.

Spring 2021: MTH 251 Calculus II (2 sections).

Fall 2020: MTH 245 Differential Equations for Engineers (2 sections).

Summer 2020: MTH 347 Differential Equations, MTH 435/535 Mathematical Modeling Seminar.

Spring 2020: MTH 347 Differential Equations, MTH 455/555 Partial Differential Equations.

Fall 2019: MTH 251 Calculus II, MTH 347 Differential Equations.

Spring 2019: MTH 252 Calculus III (2 sections).

Fall 2018: MTH 347 Differential Equations (2 sections).

Summer 2018: MTH 435 Mathematical Modeling Seminar (Study Abroad Program).

Spring 2018: MTH 251 Calculus II, MTH 440/540 Topics In Analysis.

Fall 2017: Spring 2019: MTH 252 Calculus III.

Summer 2017: MTH 435 Mathematical Modeling Seminar (Study Abroad Program).

Spring 2017: MTH 435/535 Mathematical Modeling Seminar, MTH 440/540 Topics In Analysis.

Summer 2016: MTH 435 Mathematical Modeling Seminar (Study Abroad Program).

Spring 2016: MME/MTH 495/595 Applied Nonlinear Dynamics, MTH 252 Calculus III.

Fall 2016: MTH 251 Calculus II, MTH 347 Differential Equations.

Fall 2015: MTH 435/535 Mathematical Modeling Seminar, MTH 245 Differential Equations for Engineers.

Summer 2015: MTH 435 Mathematical Modeling Seminar (Study Abroad Program).

Spring 2015: MTH 252 Calculus III, MTH 347 Differential Equations.

Fall 2014: MTH 347 Differential Equations/Engineers (2 sections).

Summer 2014: MTH 435 Mathematical Modeling Seminar (Study Abroad Program).

Spring 2014: MME/MTH 495/595 Applied Nonlinear Dynamics.

Fall 2013: MTH 347 Differential Equations (two sections), MTH 435 Mathematical Modeling Seminar.

Summer 2013: MTH 151 Calculus I.

Spring 2013: MTH 347 Differential Equations (two sections).

Fall 2012: Research leave.

Spring 2012: MTH 245 Differential Equations for Engineers.

Fall 2011: MTH 151 Calculus I, MTH 435/535 Mathematical Modeling Seminar.

Spring 2011: MME/MTH 495/595 Applied Nonlinear Dynamics.

Fall 2010: MTH 153 Calculus I, MTH 347 Differential Equations, MTH 222 Intro to Linear Algebra.