Roy Howard Goodman
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Associate Professor
Department of Mathematical Sciences
New Jersey Institute of Technology
Newark, NJ 07102
(973) 642-4261

Roy Goodman

Education

Formal

1994–1999 • Courant Institute of Mathematical Sciences, New York University, New York, NY
Ph.D. Mathematical Sciences (David W. McLaughlin, dissertation advisor)

1990–1994 • University of Michigan, Ann Arbor, MI
B.S. Mathematics (honors option), with highest honors

Additional

7/1996 • Summer School on Nonlinear Waves, Patterns, and Oscillations (Cork, Ireland)

Research Interests

- Linear and nonlinear wave propagation, PDE
- Dynamical Systems, Invariant Manifold Computations
- Mathematical modeling and asymptotic analysis of physical systems
- Vortex dynamics
- Nonlinear phenomena in optics
- Numerical Simulation

Professional Experience

2022– • **Associate Chair for Graduate Studies** NJIT Department of Mathematical Sciences

2008– • **Associate Professor (Tenured)** New Jersey Institute of Technology

2002–2008 • **Assistant Professor** New Jersey Institute of Technology

2001–2002 • **Visiting Assistant Professor** New Jersey Institute of Technology

1999-2001 • **Visiting Research Fellow** Princeton University and Bell Laboratories (Lucent), under NSF University-Industry Cooperative Research Program in the Mathematical Sciences (advisors Philip Holmes, Princeton and Michael Weinstein, Bell Labs)

Visiting Positions

2018–2019 • **Long Term Visitor** Department of Mechanical Engineering, NYU Tandon School of Engineering

Fall 2016 • **Long Term Visitor** Institute for Mathematics and Applications, University of Minnesota

Visiting Positions (continued)

2010–2011 • **Visiting Associate Professor** Department of Mathematics, Technion Israel Institute of Technology

Scholarly Activities

Refereed Journal Papers

2024 • A. Anurag, R. H. Goodman, and E. K. O'Grady, *A new canonical reduction of three-vortex motion and its application to vortex-dipole scattering*, accepted by Physics of Fluids 5/2024.

2024 • R. H. Goodman, G. Conte, and J. L. Marzuola, *QGLAB: A MATLAB Package for Computations on Quantum Graphs*, submitted 12/2023.

2023 • J. Adriazola, R. H. Goodman, and P. G. Kevrekidis, *Efficient Manipulation of Bose-Einstein Condensates in a Double-Well Potential*, Commun. Nonlin. Sci. Numer. Commun., 122, 107219.

2023 • J. Adriazola and R. H. Goodman, *Apodizer Design to Efficiently Couple Light into a Fiber Bragg Grating*, SIAM J. Appl. Math., 83, 1126–1145.

2023 • R. H. Goodman and B. M. Behring, *Transition to instability of the leapfrogging vortex quartet*, Mech. Research Comm. 128, 104068.

2022 • J. Adriazola and R. H. Goodman, *An optimal control approach to gradient-index design for beam reshaping*, J. Opt. Soc. Amer. A 38, pp. 907–915.

2022 • J. Adriazola and R. H. Goodman, *A reduction-based strategy for optimal control of Bose-Einstein condensates*, Phys. Rev. E 105, 025311.

2020 • T. E. Faver, R. H. Goodman, and J. D. Wright, *Solitary waves in mass-in-mass lattices*, ZAMP 71, 197.

2020 • A. Sagiv, A. Ditkowski, R. H. Goodman, and G. Fibich, *Loss of physical reversibility in reversible systems*, Phys. D 404, 132515.

2019 • B. M. Behring and R. H. Goodman, *Stability of leapfrogging vortex pairs: A semi-analytic approach*, Phys. Rev. Fluids 4, 124703.

2019 • R. H. Goodman and M. Porfiri, *Topological features determining the error in the inference of networks using transfer entropy*, Math. in Engineering 2, 34–54.

2019 • A. Kairzhan, D. E. Pelinovsky, and R. H. Goodman, *Instability drift of shifted states on balanced star graphs*, SIAM J. Appl. Dyn Sys. 18, 1723-1755

2019 • R. H. Goodman, *NLS Bifurcations on the bowtie combinatorial graph and the dumbbell metric graph*, Disc. Cont. Dyn. Syst. 30, 2203–2232.

2017 • R. H. Goodman, *Bifurcations of relative periodic orbits in NLS/GP with a triple-well potential*, Phys. D 359, 39–59.

2015 • R. H. Goodman, P. G. Kevrekidis, R. Carretero, *Dynamics of vortex dipoles in anisotropic Bose-Einstein condensates*, SIAM J. Appl. Dyn. Sys. 14, 699–709.

2015 • R. H. Goodman, A. Rahman, M. Bellanich, C. Morrison, *A mechanical analog of the two-bounce resonance of solitary waves: Modeling and experiment*, Chaos 25, 043109

2015 • R. H. Goodman, J. L. Marzuola, and M. I Weinstein, *Self-trapping and Josephson tunneling solutions to the nonlinear Schrödinger / Gross-Pitaevskii Equation*, Disc. Cont. Dyn. Sys. 35, 225–246.

2013 • J. K. Wróbel and R. H. Goodman, *High-order Adaptive Method for Computing Two-dimensional Invariant Manifolds of 3-D Maps*, Comm. Nonlin. Sci. and Num. Simul., 18 1734–1745.

2011 • R. H. Goodman, *Hamiltonian Hopf bifurcations and dynamics of NLS/GP standing-wave modes*, J. Phys. A: Math. Theor. 44 425101 (28pp).

2011 • R. H. Goodman and J. K. Wróbel, *High-order Bisection Methods for Computing Invariant Manifolds of 2-D Maps*, Int. J. Bifurcations and Chaos, 21, 2017–2042.

2009 • J. Bławzdziewicz, R. H. Goodman, N. Khurana, E. Wajnryb, and Y.-N. Young, *Nonlinear hydrodynamic phenomena in the Stokes flow regime*, Phys. D, 239, 1214–1224.

2008 • Y.-N. Young, J. Bławzdziewicz, V. Cristini, and R. H. Goodman, *Hysteretic and chaotic dynamics of viscous drops in creeping flows with rotation*, J. Fluid Mech., 607, 209–234.

2008 • R. H. Goodman, *Chaotic scattering in solitary wave interactions: A singular iterated-map description*, Chaos, 18, 023113.

2008 • R. H. Goodman and M. I. Weinstein, *Stability and instability of nonlinear defect states in the coupled mode equations—analytical and numerical study*, Phys. D, 237, 2731-2760.

2007 • R. H. Goodman and R. Haberman, *Chaotic Scattering and the* n*-bounce Resonance in Solitary Wave Interactions*, Phys. Rev. Lett., 98, 104103 1–4.

Scholarly Activities (continued)

2005 • R. H. Goodman and R. Haberman, *Kink-antikink collisions in the ϕ^4 equation: The* n*-bounce resonance and the separatrix map*, SIAM J. Appl. Dyn. Sys., 4, 1195–1128.

2005 • R. H. Goodman and R. Haberman, *Vector soliton interactions in birefringent optical fibers,* Phys. Rev. E 71, 056606.

2004 • R. H. Goodman, R. Haberman, *Interaction of sine-Gordon kinks with defects: The two-bounce resonance*, Phys. D, 195, 303–323.

2004 • R. H. Goodman, P.J. Holmes, and M.I. Weinstein, *Strong NLS soliton-defect interactions*, Phys. D, 192, pp 215–248.

2002 • R. H. Goodman, R. E. Slusher, and M.I. Weinstein, *Stopping light on a defect*, J. Opt. Soc. Am. B., **19**, pp. 1635–1652.

2002 • R. H. Goodman, P.J. Holmes, and M.I. Weinstein, *Interaction of sine-Gordon kinks with defects: Phase space transport in a two-mode model*, Physica D **161**, pp. 21–44.

2001 • R. H. Goodman, A.J. Majda, and D. W. McLaughlin, *Modulations in leading edges of midlatitude storm tracks* SIAM J. Appl. Math **62**, pp. 746–776.

2001 • R. H. Goodman, M.I. Weinstein, and P.J. Holmes, *Nonlinear propagation of light in one-dimensional periodic structures*, Journal of Nonlinear Science, **11**, pp 123–168.

1995 • R. H. Goodman, D.S. Graff, L.M. Sander, P. Leroux-Hugon, and E. Clement, *Trigger waves in a model for catalysis* Phys. Rev. E. **52**, pp. 5904–5909.

Book Chapters

2019 • R. H. Goodman, *Mathematical analysis of fractal kink-antikink collisions in the ϕ^4 model* in **A dynamical perspective on the ϕ^4 model**, Springer, P. G. Kevrekidis and J. Cuevas-Maraver, eds.

Unrefereed Proceedings Publications

2005 • R. H. Goodman, R. E. Slusher, M.I. Weinstein and M. Klaus, *Trapping light with grating defects* **Mathematical Methods for Nonlinear Wave Propagation**, Contemp. Math **379**, (2005), pp. 83–92.

2005 • P.J. Holmes, R. H. Goodman, and M.I. Weinstein, *Trapping of kinks and solitons by defects: Phase space transport in finite-dimensional models*, Proceedings of the International Conference on Progress in Nonlinear Science dedicated to Alexander Andronov, Nizhny Novgorod, Russia, July 2001.

Book Reviews

2017 • Review of *Methods of Mathematical Modeling* by Witelski and Bowen, SIAM Review **60** (2018), pp. 215–216.

Other Unrefereed Writing

2024 • R. H. Goodman, *An English Translation of Gröbli's Ph.D. Dissertation: "Specielle Probleme über die Bewegung geradliniger paralleler Wirbelfäden"*, arXiv preprint, April 2024.

2024 • *SIAM New York – New Jersey – Pennsylvania Section Holds Inaugural Conference*, SIAM News, January 2024.

2019 • *Four Decades of Kink Interactions in Nonlinear Klein-Gordon Models: A Crucial Typo, Recent Developments and the Challenges Ahead*, DSWeb, a website of the SIAM Activity Group in Dynamical Systems, October 2019

2019 • *Markdown: A Writing Tool for Every Applied Mathematician's Toolbox*, SIAM News, May 2019.

Teaching Publications

2007 • B. Bukiet and R. H. Goodman, Methods of Applied Mathematics (sample honors syllabus), Honors in Practice, 3, (2007) 171–175.

Scholarly Activities (continued)

Conference Presentations, invited

- **4/2023** • Second Drexel University Waves Workshop, Philadelphia, PA, invited speaker
- **8/2022** • SIAM Conference on Nonlinear Waves and Coherent Structures, Bremen, Germany, minisymposium speaker
- **7/2022** • Coherent Structures: Current Developments and Future Challenges, Lorentz Center, Leiden, Netherlands
- **3/2022** • Twelfth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena, Athens, GA, minisymposium speaker
- **12/2019** • Canadian Mathematical Society Winter Meeting, Toronto, ON, invited speaker in session on Symmetry in Dynamical Systems
- **4/2019** • The Eleventh IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, GA, minisymposium speaker
- **10/2018** • AMS Sectional Conference, Ann Arbor, MI, special session speaker
- **6/2018** • SIAM Conference on Nonlinear Waves and Coherent Structures, Anaheim, CA, minisymposium speaker
- **8/2017** • Applied Mathematics, Modeling and Computational Science (AMMCS), Waterloo ON, minisymposium speaker
- **5/2017** • SIAM Conference on Applications of Dynamical Systems, Snowbird, UT, minisymposium speaker
- **10/2016** • Workshop on Mathematical and Physical Models of Nonlinear Optics, Institute for Mathematics and applications, Minneapolis, MN, invited speaker
- **6/2016** • Coherent Structures in PDEs and Their Application, Oaxaca, MX, invited speaker
- **7/2015** • Workshop on Pattern Formation, Dalhousie University, Halifax, NS, invited speaker
- **6/2015** • International Conference on Mathematics of Nonlinearity in Neural and Physical Science, Shanghai, China, invited speaker
- **8/2014** • SIAM Conference on Nonlinear Waves and Coherent Structures, Cambridge, UK, minisymposium speaker
- **5/2013** • Frontiers in Applied Mathematics, Newark, NJ, minisymposium speaker
- **5/2013** • SIAM Conference on Applications of Dynamical Systems, Snowbird, UT, featured minisymposium speaker
- **7/2012** • 2nd Conference on Localized Excitations in Nonlinear Complex Systems (LENCOS'12), Seville, Spain
- **4/2012** • Nonlinear Waves: Asymptotic Theory and Applied Mathematics, Mexico City, MX, invited presentation
- **11/2011** • SIAM Conference on Analysis of Partial Differential Equations, San Diego, CA, invited minisymposium speaker
- **8/2010** • SIAM Conference on Nonlinear Waves and Coherent Structures, Philadelphia, PA, minisymposium speaker
- **8/2009** • Analysis of nonlinear wave equations and applications in engineering, Banff International Research Station, Alberta, Canada, invited participant and speaker in 5-day workshop
- **5/2008** • Seventh AIMS Conference on Dynamical Systems and Differential Equations, Arlington, TX, minisymposium speaker
- **3/2008** • AMS Sectional Meeting, New York, NY, minisymposium speaker
- **5/2007** • SIAM Conference on Application of Dynamical Systems, Snowbird, UT, minisymposium speaker
- **4/2007** • AMS Sectional Meeting, Hoboken, NJ, minisymposium speaker
- **12/2006** • CMS Winter Meeting, Toronto, ON, minisymposium speaker
- **9/2006** • SIAM Conference on Nonlinear Waves and Coherent Structures, Seattle, WA, minisymposium speaker
- **7/2006** • SIAM Annual Meeting, Boston, MA, minisymposium speaker
- **5/2005** • SIAM Conference on Application of Dynamical Systems, Snowbird, UT, minisymposium speaker
- **4/2005** • IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena, minisymposium speaker
- **10/2004** • SIAM Conference on Nonlinear Waves and Coherent Structures, Orlando, FL, minisymposium speaker
- **7/2004** • Workshop on Mathematical Ideas in Nonlinear Optics, Edinburgh, UK, invited 30-minute talk.
- **10/2003** • AMS Sectional Meeting, Chapel Hill, NC, minisymposium speaker
- **7/2002** • SIAM 50th anniversary Conference, Philadelphia, PA, minisymposium speaker

Conference Presentations, Contributed

- **5/2023** • SIAM Conference on Applications of Dynamical Systems, Portland, OR, contributed talk
- **6/2012** • SIAM Conference on Nonlinear Waves and Coherent Structures, Seattle, WA, contributed talk
- **7/2011** • 10th International Conference on the Mathematical and Numerical Aspects of Waves, Vancouver, BC, contributed talk (refereed)

Scholarly Activities (continued)

5/2010 • Frontiers in Applied Mathematics, Newark, NJ, minisymposium speaker and poster
5/2009 • SIAM Conference on Application of Dynamical Systems, Snowbird, UT, poster with graduate student J. Wróbel
2/2009 • SIAM Conference on Computational Science and Engineering, Miami, FL, poster with graduate student J. Wróbel
7/2008 • SIAM Conference on Nonlinear Waves and Coherent Structures, Rome, Italy, contributed talk
5/2007 • Frontiers in Applied and Computational Mathematics, Newark, NJ, poster
5/2006 • Frontiers in Applied and Computational Mathematics, Newark, NJ, poster
10/2005 • International Workshop on Applied Dynamical Systems. Centre des Recherches Mathematiques, Montreal, QC, Canada, poster
5/2005 • Frontiers in Applied and Computational Mathematics, Newark, NJ, contributed poster
10/2004 • Conference in honor of D. McLaughlin's 60th birthday, Chapel Hill, NC, poster
5/2004 • Frontiers in Applied and Computational Mathematics, Newark, NJ, poster
1/2004 • Dynamics Days, Chapel Hill, NC, poster
5/2003 • SIAM Conference on Application of Dynamical Systems, Snowbird, UT, contributed talk
5/2002 • NSF-CBMS Regional Research Conference on Mathematical Methods for Nonlinear Wave Propagation, North Carolina A&T State University, poster.

Other Significant Talks

3/2024 • Mathematics Colloquium, Lehigh University
10/2020 • Mathematical Physics Seminar, Yeshiva University
2/2020 • Applied Mathematics Colloquium, New Jersey Institute of Technology
3/2019 • Applied Math Seminar, Drexel University
10/2018 • Analysis and PDE Seminar, University of North Carolina
4/2018 • Mathematics Seminar, University of Vermont
2/2017 • AIMS Seminar, University of Michigan
9/2016 • IMA Visitors Seminar, University of Minnesota
3/2015 • Math Department Seminar, Southern Methodist University
5/2014 • Dynamical Systems Seminar, Mechanical Engineering, NYU Polytechnic Institute
4/2014 • Mathematics Seminar, Montclair State University
4/2014 • Computational and Applied Mathematics Seminar, Rutgers University
3/2013 • Center for Computational Science Seminar, Tulane University
1/2013 • Applied Math Seminar, Drexel University
3/2012 • Center for Applied Mathematics Seminar, University of Massachusetts
12/2010 • Solid State Center Colloquium (Physics), Technion Israel Institute of Technology
11/2010 • Applied Math Seminar, Weizmann Institute, Rehovot Israel
10/2010 • Applied Math Colloquium, Tel Aviv University
10/2010 • Applied Math and PDE Seminar, Technion Israel Institute of Technology
3/2009 • Mathematics Colloquium, University at Buffalo
1/2009 • Dynamical Systems Seminar, Drexel University
12/2007 • Lefschetz Center for Dynamical Systems seminar, Brown University
11/2007 • Dynamical Systems and Nonlinear Science Colloquium, Georgia Tech
2/2007 • Dynamical Systems and Nonlinear Science Seminar, Princeton University
11/2006 • Applied Mathematics Colloquium, Columbia University
2/2004 • Dynamical Systems and Nonlinear Science Seminar, Princeton University
9/2004 • Mathematics Colloquium, University of Vermont
10/2002 • Mathematics Colloquium, Southern Methodist University
2/2002 • Mathematics Colloquium, Worcester Polytechnic Institute
1/2002 • Mathematics Colloquium, Drexel University
12/2001 • Mathematics Collquium, University of Maryland Baltimore County
11/2001 • Lefschetz Center for Dynamical Systems seminar, Brown University
10/2001 • Applied Mathematics Colloquium, NJIT

Scholarly Activities (continued)

Conferences & Minisymposia Organized

5/2021 • Minisymposium, SIAM Conference on Application of Dynamical Systems, online
10/2017 • Waves, Spectral Theory & Applications—Part 2, Chapel Hill, NC
9/2015 • Organizing Committee, Conference on Waves, Spectral Theory & Applications, Princeton, NJ
5/2014 • Organizing Committee & 2 Minisymposia, Frontiers in Applied & Computational Mathematics, Newark, NJ
5/2013 • Minisymposium, Frontiers in Applied & Computational Mathematics, Newark, NJ
8/2010 • Organizing Committee, SIAM Conference on Nonlinear Waves & Coherent Structures, Philadelphia, PA
8/2010 • Minisymposium, SIAM Conference on Nonlinear Waves & Coherent Structures, Philadelphia, PA
5/2010 • Special Session, AMS Spring Eastern Meeting, Newark, NJ
3/2008 • Special Session, AMS Spring Eastern Meeting, New York, NY
5/2007 • Minisymposium, SIAM Conference on Application of Dynamical Systems, Snowbird, UT
5/2007 • Minisymposium, Frontiers in Applied & Computational Mathematics, Newark, NJ
5/2005 • Minisymposium, SIAM Conference on Application of Dynamical Systems, Snowbird, UT
5/2005 • Minisymposium, Frontiers in Applied & Computational Mathematics, Newark, NJ
4/2005 • Minisymposium, IMACS International Conference on Nonlinear Evolution Equations & Wave Phenomena, Athens, GA
10/2004 • Organizer, Conference in honor of D. McLaughlin's 60th birthday, Chapel Hill, NC
5/2004 • Minisymposium, Frontiers in Applied & Computational Mathematics, Newark, NJ

Other Workshop Participation

2014 • The Thirtieth Annual Workshop on Mathematical Problems in Industry, NJIT, Newark, NJ, June, 2014

Grants

2022-2025 • Principal Investigator, Dynamics and scattering of vortices and vortex rings, NSF DMS–2206016, $300,000
2008–2013 • Principal Investigator, Nonlinear waves and dynamical systems, NSF DMS–0807284, $199,881
2007–2009 • Co-Principal Investigator, **CSUMS:** Research and Education in Computational Mathematics for Undergraduates in the Mathematical Sciences at NJIT, NSF DMS-0639270, $536,696
2005–2008 • Principal Investigator, Mathematical methods for wave interactions, NSF DMS-0506495, $85,000
2004-2007 • Investigator, Acquisition of computer cluster for the Center of Applied Mathematics and Statistics at NJIT, NSF DMS–040590, Major Research Instrumentation grant, $270,870
2002–2005 • Principal Investigator, Pulse propagation and capture in Bragg grating optical fibers, NSF DMS–0204881, $73,001

Patents Awarded

10/5/2004 • R. H. Goodman, M. I. Weinstein and R. E. Slusher, Trapping light pulses at controlled perturbations in periodic optical structures, Patent No. US 6801685

Teaching

At NJIT

Undergraduate • Calculus I, Honors Calculus 2, Calculus 3A, Differential Equations, Intermediate Differential Equations (Dynamical Systems), Linear Algebra, Honors Linear Algebra, Applied Numerical Methods, Advanced Applied Numerical Methods, Mathematical Methods for Scientists and Engineers, Mathematical Analysis I, Honors Methods of Applied Mathematics 1 & 2 (Capstone course), Mathematical Modeling, Complex Analysis, Partial Differential Equations
Masters • Numerical Methods for Computation

Teaching (continued)

Ph.D. • Asymptotic Methods I, Advanced Ordinary Differential Equations, Numerical Methods I, Wave Propagation, Special Topics: Dynamical Systems

At NYU

Undergraduate • Precalculus Mathematics

Ph.D. Dissertation Advisor

2022– • Atul Anurag
Topic: Generalization of the Leapfrogging Orbit of Vortices

2017–2021 • Jimmie Adriazola
Dissertation: *Coherent Control of Dispersive Waves*

2016–2020 • Brandon Behring
Dissertation: *Dances and Escape of the Vortex Quartet*

2013–2016 • Casayndra Basarab
Dissertation: *Hamiltonian Bifurcations in Schrödinger Trimers*

2008–2011 • Jacek Wróbel
Dissertation *High-order Adaptive Method for Computing Invariant Manifolds of Maps*

Other Student Supervision

2023 • Ellison O'Grady, Provost Undergraduate Research and Innovation Summer Fellow

2021–2022 • Noah Roselli, Undergraduate Research Project

2010 • Kyle Mahady, Graduate Summer Research Project

2009–2010 • Casayndra Basarab and Priyanka Shah, CSUMS Undergraduate Research Project

2007–2008 • Matthew Peragine and Fatima Elgammal, CSUMS Undergraduate Research Project

2007 • Xiaoni Fang, Graduate Summer Research Project

2006 • Maciej Malej, Undergraduate Summer Research Project

2004– • Member of dissertation committees for D. Cargill, M. Chabane, Y. Chen, G. Conte (UNC–Chapel Hill), I. Jancigova, Y. Joshi, Y. Mileyko, A. Rahman, B. Ren

Service

University

2022– • Math Department Representative to Committee on Graduate Education

2022 • Member, Faculty Senate Executive Committee

2021–2022 • Faculty Senate Representative to Committee on Graduate Education

2019–2022 • Member, Faculty Senate

2015–2018 • Member Honors College Bauder Scholarship Committee

2014–2017 • Member, University Senate Committee on Campus Life

2002–2004 • Advisor to undecided CSLA freshmen

2003–2005 • Member, NJIT Committee on Health and Safety

Department

2022– • Member, Curriculum Committe

2022– • Associate Chair for Graduate Studies

2021– • Chair, CAMS Membership Committee

2021–2022 • Chair, Computation in the Curriculum Committee

2020– • Chair, then member, Online Instruction Committee

2017–2018, 2021–2022 • Member, Hiring committee

2008–2022 • Applied Math Undergraduate Advisor

Service (continued)

2002–2003, 2011–2018 • Applied Mathematics Minor Advisor
2003–2010 • Undergraduate Math Club and Pi Mu Epsilon Honor Society Advisor
2007–2010 • Organizer, Wave Propagation Seminar

Editorial Board Membership

2023– • Frontiers in Photonics

Peer reviewing activity

- **Panelist**, NSF Division of Mathematical Sciences
- **Tenure Reviewer** One review
- **Grant Reviewer**, individual grants, NSF-DMS, Israel Science Foundation, MITACS (Canada)

- **Referee**, AIMS Mathematics, Analysis and Applications, Annales Henri Lebesgue, Applied Mathematics Letters, Chaos, Chaos Solitons & Fractals, Communications in Nonlinear Science and Numerical Simulation, Discrete and Continuous Dynamical Systems B, Europhysics Letters, European Physics Journal Plus, Frontiers in Photonics, IMA Journal of Applied Mathematics, International Journal of Theoretical Physics, Journal of Computational and Applied Mathematics, Journal of Computational Physics, Journal of Engineering Mathematics, Journal of High Energy Physics, Journal of Lightwave Technology, Journal of Low Temperature Physics, Journal of Marine Science and Engineering, Journal of Modern Optics, Journal of Nonlinear Science, Journal of the Optical Society of America B, Journal of Physics A, Mathematics, Mathematics and Computers in Simulation, Modern Physics Letters B, Nonlinearity, Numerical Methods in PDE, Optics Express, Optics Letters, Physica D, Physical Review A, Physical Review D, Physical Review E, Physical Review Fluids, Physical Review Letters, PLOS One, Proceedings of the American Mathematical Society, Proceedings of the Royal Society A–Mathematical and Physical, Scientific Reports, SIAM Journal of Applied Dynamical Systems, SIAM Journal of Applied Mathematics, SIAM Journal of Mathematical Analysis, SIAM Textbook Publishing, Studies in Applied Mathematics, Water, Wave Motion

Professional Societies

2022–2024 • SIAM New York/New Jersey/Pennsylvania Section, Founding president
2017–2018 • SIAM Nonlinear Waves SIAG Martin Kruskal Lecturer Selection Committee
2009–2010 • SIAM, SIAG Nonlinear Waves and Coherent Structures (Secretary)
• AMS (member
• SIAM, Society for Industrial and Applied Mathematics (member)
• SIAM, SIAG for Dynamical Systems Activity Group (member)
• SIAM, SIAG for Nonlinear Waves and Coherent Structures (member)

References

- **Prof. Alejandro Aceves**
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  Southern Methodist University
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References (continued)

- **Prof. M. Gregory Forest**
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  Department of Mathematics
  CB 3250 Phillips Hall
  University of North Carolina at Chapel Hill
  Chapel Hill, NC 27599
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- **Prof. David W. McLaughlin**
  Silver Professor of Mathematics and Neural Science
  Courant Institute of Mathematical Sciences
  New York University
  1113 Warren Weaver Hall
  251 Mercer St.
  New York, New York (US) 10012
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- **Prof. Michael I. Weinstein**
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Last modified by Roy Goodman on May 18, 2024.