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Curriculum Vitae
Susan Friedlander

Professional Addresses:

Department of Mathematics
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Education:

1967	B.SC.	London University
1970	M.S.	M.I.T.
1972	Ph.D	Princeton University

Employment:

1972-74	Visiting Member, Courant Institute of Mathematical Sciences
1974-75	Instructor, Princeton University, Mathematics Department
1975-82	Assistant Professor, University of Illinois at Chicago, Math, Stat., and Comp. Sci. Dept.
1982-89	Associate Professor, University of Illinois at Chicago, Math, Stat., and Comp. Sci. Dept.
1989-08	Professor, University of Illinois at Chicago, Math, Stat., and Comp. Sci. Dept.
2007-	Professor, University of Southern California
2008-	Director, Center for Applied Mathematical Sciences, USC

Academic honors / Awards / Recognition:

1967-69	Kennedy Memorial Scholarship
1985	Lecturer in a series of seven distinguished women scientists, Science Museum of Minnesota
1991	Plenary lecturer at the Cambridge Conference in honor of Dame Mary Cartwright
1993	Invited hour address at AMS regional meeting in DeKalb, Il.
1993	N.S.F. Visiting Professorship for Women Award
1995	Elected Honorary Member, Moscow Mathematical Society
1998	Medal of Institut Henri Poincare
1998	Gauthier Villars Prize for Nonlinear Analysis
1999	Plenary lecturer at the SIAM Annual Meeting, Atlanta
2003	University of Illinois Senior Scholar Award
2012	Elected Fellow, SIAM
2012	Elected Fellow, AMS
2012	Elected Fellow, American Association for the Advancement of Science
2019	Senior Raubenheimer Award for Research and Scholarship

Grant Support:

1975-22	N.S.F. summer grants
1982-83	N.S.F. sabbatical grant
1988	N.S.F. U.S.-Swiss Cooperative Science Program
1991-92	N.S.F. U.S.-U.S.S.R. Cooperative Science Program
1993-96	N.S.F. U.S.-Russian Program
1993-95	N.S.F. Special Projects (with R. MacPherson)
1993-95	N.S.F. Visiting Professorship for Women
2002-03	Indo- U.S. Forum Grant (with Kalyan Sinha)
2006	N.S.A. Workshop Grant
2007-09	C.R.D.F. U.S.-Russian Grant (with V. Yudovich)
2011-14	XSEDE supercomputer grant (with F. Jacobitz)

Editorial Positions:

1991-96	Editorial Board, Geophysical and Astrophysical Fluid Dynamics
1992-98	Editorial Board, SIAM Journal of Mathematical Analysis
1993-16	Editorial Committee, Notices of the AMS
1996-05	Chair, Colloquium Publications of the AMS
2010-	Associate Editor, Journal of Mathematical Fluid Mechanics
2014-20	Editorial Board, SIAM J. of Multiscale Modeling and Simulation
2018-	Editorial Board, Pure and Applied Analysis
2005-24	Editor in Chief, Bulletin of the AMS

Visiting Positions:

1977-78	Visiting Lecturer, Oxford University
1978	Visitor at D.A.M.T.P., Cambridge University
1982-83	Professeur Associe, University of Paris VI
1982-83	Visiting Member, I.H.E.S., Paris
1983	Visiting Fellow, Max Planck Institute, Bonn
1984	Visiting Fellow, E.T.H., Zurich
1985	Visiting Member, I.H.E.S., Paris
1985-86	Visiting Fellow, Princeton University
1986	Visiting Fellow, E.T.H., Zurich
1986	Visiting Scholar, M.S.R.I., Berkeley
1987	Visiting Member, I.H.E.S., Paris
1988	Visiting Fellow, E.T.H., Zurich
1988	Visiting Member, I.H.E.S., Paris
1988	Visitor, Institute of Physics of the Earth, Acad. Of Sciences USSR, Moscow
1989	Visiting Member I.H.E.S., Paris
1989	Visitor, I.P.E., Academy of Sciences, U.S.S.R., Moscow
1990	Visiting Member, I.H.E.S., Paris
1991	Visiting Fellow, E.T.H., Zurich
1992	Visiting Member, Newton Institute, Cambridge
1993	Visiting Member, I.H.E.S., Paris
1994	Visiting Professor, Brown University
1994	Visiting Professor, Northwestern University
1995	Visiting Member, MSRI, Berkeley
1996, 97, 01	Visitor, Center for Interdisciplinary Science, Heidelberg

1997 Research in Pair Program, Oberwolfach
1998 Visiting Member, I.H.E.S., Paris
1999 Member, I.A.S., Princeton
1999 Research Professor, M.S.R.I., Berkeley
2000 Visiting Member, ETH, Zurich
2000 Senior Visiting Fellow, Newton Institute, Cambridge
2002 Visiting Member, I.H.E.S., Paris
2003 Visiting Fellow, E.T.H., Zurich
2004 Visiting Member, I.H.E.S., Paris
2004 Professeur Invite, E.N.S.-Cachan, Paris
2005 Member, IAS, Princeton
2006 Visiting Member, I.H.E.S., Paris
2007 Visiting Member, Fields Institute, Toronto
2007 Visiting Member, M.S.R.I., Berkeley
2009 Visiting Fellow, Trinity College, Cambridge
2015 Research in Pair Program, Oberwolfach
2020 Member, I.A.S., Princeton
2021 Research Professor, M.S.R.I., Berkeley

Professional Activities:

Officer of A.M.S.

Associate Secretary, American Mathematical Society, 1996-2010
Member, Council of the American Mathematical Society, 1996-2024

Committees and Evaluation Panels

Member-at-large, American Mathematical Society Council, 1983-85
Regional Coordinator for Committee on Special Funds for I.C.M, 1984-86
AMS, Committee on Membership, 1990-95
AMS fSU Aid Committee, Chairman of library subcommittee, 1992-97
International Science Foundation Grants Selection Panel, Co-chairman, 1993-94
Member, External Review Committee of the Mathematics Department, University of Maine, 1997
NSF Applied Math Proposal Review Panel, 1997-1998, 2013
Member, Joint Policy Board for Mathematics, 1998-2000
Member, Scientific Advisory Committee, MSRI, 2001-2006
CRDF Proposal Review Panel, 2005
Member, External Review Committee, Math Department, Georgia Tech, 2007
Member, External Review Committee, Math Department, Yale University, 2008
Member, Board of Mathematical Sciences and their Applications of the National Academies, 2008-2011
Member, Scientific Advisory Committee, CRM, Montreal, 2010-2014
Reviewer, Radcliffe Institute Fellowship Program, 2010
Reviewer, Simons Foundation, Math and Physical Sciences, 2010-14
Nominating Committee, American Math Society, 2012-2015
Member, Scientific Program Committe, ICIAM 2012-2015
Steering Committee, Mathematical Congress of the Americas, 2011-2013
Member, Section A Steering Committee, American Association for the Advancement of Science, 2013-2016
Member, Computer Science Department Review, USC 2014
Member, External Review, Math Department UCSC, 2014
Member, External Review, Math Department University of Nebraska, 2014

Member, External Review, Math Department, VaTech, 2015
Chair, Section A Nominating Committee, AAAS, 2019-2021
Chair, Executive Committee, Mathematical Council of the Americas, 2013-2024
Member, MIT Math Department Visiting Committee, 2013-2021
Member, Board of the Association for Mathematical Research, 2021-
Member, US Delegation to the IMU, 2022
Member, Organizing Committee for the 2026 International Congress of Mathematicians

Professional Organization:

Conference Organization

AMS - Benelux Meeting Program Committee, 1995-96
AMS - South Africa Joint Meeting Program Committee, 1996-97
AMS - Australia Joint Meeting Program Committee, 1998-99
AMS - Spain Joint Meeting Program Committee, 2001-03
AMS - India Joint Meeting Program Committee, 2001-03
AMS - German-Austrian Joint Meeting Program Committee, 2002-05
AMS - Poland Joint Meeting Program Committee, 2005-07
AMS - Winter Meeting (New Orleans) Program Committee, 2006-07
AMS - Shanghai Joint Meeting Program Committee, 2006-08
AMS - Mexican Joint Meeting Program Committee, 2009-10
MCA 2013 - Mathematical Congress of the Americas, Program Committee, 2013
ICIAM - Program Committee, 2013-15
MCA 2017 - Mathematical Congress of The Americas, Steering Committee, 2017
MCA 2021 - Mathematical Congress of The Americas, Steering Committee, 2021
MCA 2025 - Mathematical Congress of The Americas, Steering Committee, 2025

Workshop Organization

Co-organizer, U.S.-Swiss conference "Internal waves in geophysical contexts", 1988
Co-organizer, U.S.-Russian conference "MHD stability and dynamics", 1992
Co-organizer, Research Lectures, Park City Program on Nonlinear Waves, 1995
Co-organizer, Mini-symposium of Mathematical Fluid Dynamics, IMACS, Berlin, 1997
Co-organizer, Session on Fluid Dynamics, AMS-SAMS International Meeting, 1997
Co-organizer, Session on Fluid Dynamics, AMS-AuMS International Meeting, 1999
Co-organizer Session on Jean Leray, AMS Austin Meeting, 1999
Co-organizer, Session on Mathematical Fluids, AMS-SMF International Meeting, 2001
Co-organizer, Session on Fluid Dynamics, AMS-RSME International Meeting, 2003
Co-organizer, Session on PDE and applications, AMS-India International Meeting, 2003
Co-organizer, Session of Spectral Theory, AMS Northwestern Meeting, 2004
Co-organizer, Analytical and Stochastic Fluid Dynamics, MSRI 2005
Co-organizer, Session on PDE of evolution type, AMS-Polish International Meeting, 2007
Co-organizer, Fluids Thematic Year, TIFR Bangalore, 2007
Co-organizer, Session of the Euler equations, AMS DePaul Meeting, 2007
Co-organizer, Session on Mathematical Fluids, AMS-Brazil International Meeting, 2008
Co-organizer, Southern California Workshop on the Mathematics of Fluids, 2008
Co-organizer, Conference for 85th Birthday of Cathleen Morawetz, Fields Institute, 2008
Co-organizer, Conference on Analysis of Fluid Stability, Maxwell Institute, Edinburgh, 2009
Co-organizer, Session on PDE and Harmonic Analysis, Baylor University, 2009
Co-organizer, Southern California Symposium on Fluids, Caltech, 2010
Co-organizer, Session on Nonlinear PDE and Applications, UCLA, 2010

Co-organizer, Workshop on Mathematical Fluids, Oberwolfach, 2012
Co-organizer, Workshop on Climate Change, Natural Hazards and Risks, Mexico, 2013
Co-organizer, Workshop on Mathematical Fluid Dynamics, Oberwolfach, Germany, 2015
Co-organizer, Southern California SIAM Symposium Claremont Colleges, 2016, 2017, 2018, 2022
Co-organizer, Workshop on Probabilistic Perspectives in Nonlinear PDEs. ICMS, Edinburgh, 2017

Mentoring Activities

Organizer: "Celebration of Women in Mathematics" Conference, M.I.T., 1994
Mentoring program for women graduate students, Institute for Advanced Study Program, 1995
Panel discussion, Berkeley / Mills College College summer program for women, 1995
Panel discussion, "Launching a career in mathematics", Association for Women in Mathematics Workshop, Winter Meeting, AMS, 1996
AWM representative to the Joint Committee on Women, 2003-05
Co-principal speaker, Nebraska Conference for Women, 2005
Co-organizer, Celebration of Ladyzhenskaya and Oleinik, MSRI, 2006
Co-organizer, 85th Birthday Fest for Cathleen Morawetz, Fields Institute 2008
Mathematics Department Career Advice Panels, 2014-2024

Selected Invited Lectures:

seminars- international universities

1994 University of Stockholm
1996 University of Exeter
1996 University of Bayreuth
1996 Academy of Sciences, Beijing
1996 University of Heidelberg
1996 University of Stuttgart
1997 University of Heidelberg
1997 I.C.T.P. Trieste
1997 U. of Witswatersand, Johannesburg
1997 Analysis Nonlineal, UNAM, Mexico City
1998 College de France Seminar of J.-L. Lions
1998 Institut Henri Poincare, Paris
1998 Ecole Normal Superieure, Paris
1998 University of Paris VI
1998 Max Planck Institut, Bonn
1998 University of Utrecht, Netherlands
1998 University of Paris- Orsay
1998 Lab. Dynamic Meteorology, ENS, Paris
1998 Observatoire de France, Toulouse
1999 University of Sidney, Sidney
2001 University of Gottingen, Graduate Colloquium
2001 University of Heidelberg, Heidelberg
2001 University of Stuttgart, Stuttgart
2001 Institut Henri Poincare, Paris
2002 Ecole Normal Supereirure, Lyon
2003 ETH, Zurich
2003 TIFR, Bangalore
2004 University of Zurich

2004 University of Paris - 7
2004 ENS- Lyon
2004 University of Paris-Nord
2004 ENS- Paris
2004 University of Edinburgh
2004 University of Paris-Orsay
2006 University of Lund
2006 R.I.M.S., University of Kyoto
2006 Graduate Center, University of Tokyo
2007 University of Toronto/Fields Institute
2007 University of Paris-Nord
2008 East China Normal University, Shanghai
2009 University of Cambridge
2009 University of Nottingham
2009 ENS - Paris
2011 Oxford University
2011 University of Campinas, Brazil
2011 Federal University, Rio de Janeiro, Brazil
2012 University of Sydney
2012 Australian National University
2012 Melbourne University
2013 Prague University
2015 University of Palermo
2018 University of Vienna
2019 Trinity College, Dublin
2023 Mathematical Institute, Oxford

seminars - American universities

1994 Brown University, Analysis Seminar
1994 University of Virginia, Joint Pure- Applied Colloquium
1994 Brown University, Fluid Mechanics Seminar
1994 Yale University, Analysis Seminar
1994 Brown University, Applied Math Colloquium
1994 U.S.C., Center for Applied Math Sciences
1994 University of Houston, Nonlinear Analysis Seminar
1994 University of Illinois, Urbana, Theoretical Mechanics Colloquium
1994 University of Arizona, Applied Math Seminar
1995 University of California, Berkeley, Colloquium
1996 Brown University, P.D.E. Seminar
1996 Notre Dame University, Colloquium
1996 University of Missouri, Colloquium
1996 Northwestern University, PDE Seminar
1996 University of Illinois, Urbana, Math in Science Series
1997 University of Texas, Austin Applied Math Seminar
1997 University of Chicago, Applied Math Seminar
1997 Kansas State University, Colloquium
1998 University of Michigan, P.D.E. Seminar
1998 Northwestern University, Nonlinear Science Seminar
1999 Ohio State University, Applied Math Seminar

1999 University of California at Irvine, P.D.E. Seminar
1999 Purdue University, Colloquium
1999 Princeton University, Fluid Dynamics Seminar
1999 Institute for Advanced Study, Turbulence Seminar
1999 Courant Institute, MHD Seminar
1999 Princeton University, Applied Math Colloquium
1999 Brown University, Applied Math Colloquium
1999 University of Pittsburgh, Math Colloquium
1999 U.C. Irvine, PDE Seminar
1999 Notre Dame University, Colloquium
2000 University of Wisconsin, PDE Seminar
2000 Brown University, PDE Seminar
2000 University of Missouri, "Show me" Lecture
2000 Washington University, Colloquium
2000 University of Missouri, Colloquium
2000 University of Missouri, PDE Seminar
2000 University of Indiana, PDE Seminar
2000 University of Indiana, Colloquium
2001 University of Chicago, Colloquium
2001 University of Utah, Applied Math Seminar
2002 University of Texas at Austin, Applied Math Seminar
2002 North Carolina State, Colloquium
2002 USC, Colloquium
2002 IIT, Colloquium
2002 University of Michigan, PDE Seminar
2003 Princeton University, Analysis Seminar
2004 Notre Dame, Applied Math Seminar
2004 Concordia University, Analysis Seminar
2004 USC, Colloquium
2005 IAS, Members Seminar
2005 Rutgers, Colloquium
2005 Princeton, Joint Princeton-IAS-Rutgers Analysis Seminar
2005 Courant, NYU, Analysis Seminar
2005 Princeton University, Noetherian Ring
2005 Penn State University, Colloquium
2005 Yale, Analysis Seminar
2006 U.C. Irvine, Colloquium
2006 Indiana University, Colloquium
2006 University of Southern California, Colloquium
2007 Northwestern, PDE Seminar
2007 UCLA, Applied Colloquium
2008 U.C. Irvine, Colloquium
2008 U.C. Santa Barbara, Colloquium
2008 Cal Poly, San Luis Obsipo, Colloquium
2008 California Institute of Technology, Applied Colloquium
2008 University of Texas, Austin, Analysis Seminar
2009 Arizona State University, Colloquium
2009 University of Texas, Austin, Distinguished Women in Math Lecture.
2010 U.C. Riverside, Colloquium
2010 UIC, Applied Math Seminar

2011 Ohio State, PDE seminar
2011 U.C. Irvine, Colloquium
2011 Penn State University, Applied Math Seminar
2012 U.C. Santa Cruz, Colloquium
2012 Claremont Center for Math Sciences, Colloquium
2012 University of Memphis, Colloquium
2012 University of Pittsburgh, PDE Seminar
2012 Pomona College, Colloquium
2012 U.C. Santa Cruz, Colloquium
2013 Tulane University, Colloquium
2013 University of Illinois, PDE Seminar
2013 Princeton University, Math Fluids Seminar
2013 Courant Institute, NYU, Analysis Seminar
2014 University of Texas, Austin, Colloquium
2015 Oregon State, Analysis Seminar
2015 UCLA, Analysis Seminar
2015 Oregon State, Colloquium
2015 University of Houston, Colloquium
2017 Tulane University, Colloquium
2017 Brigham Young University, Laurent Schwarz Lecture
2017 Vanderbilt University, Shanks Fluid Dynamics Lecture
2018 Brown University, Probability Seminar
2018 Vanderbilt, Colloquium
2020 Arizona State, Distinguished Lecture (given in 2022)
2020 UIC, PDE Seminar
2020 I.A.S. Analysis Seminar (Zoom)
2021 I.A.S. Mathematics Conversations (Zoom)
2021 I.A.S. Member's Colloquium (Zoom)
2021 M.S.R.I. PDE Seminar (Zoom)
2022 CCMS Applied Math Seminar (Zoom)

invited conference lectures

1992 Dynamo Theory Workshop, Newton Institute, Cambridge
1994 Special Session, AMS meeting at Manhattan
1994 Waves in the Ocean Workshop, M.S.R.I.
1995 Course of four lectures on non-linear waves at IAS, Princeton
1996 International Conference on Hyperbolic P.D.E., Hong Kong
1996 Special Session, A.M.S. meeting at Columbia, Missouri
1996 Oberwolfach meeting on Mathematical Fluid Dynamics
1997 Special Session, Joint A.M.S. - S.A.M.S. meeting
1997 Oberwolfach meeting on Fluid Stability
1997 IMACS mini-symposium, Berlin
1998 A.M.S. Special Session, Temple University
1999 Conference on M.H.D. Instabilities, I.H.P. Paris
1999 Dynamical Systems Workshop, IAS, Princeton
1999 Fluids Mimi-symposium, SIAM annual meeting, Atlanta
1999 Fluids Special Session, Joint AMS-AuMS meeting in Australia
1999 Fluids Special Session, AMS meeting in Austin
2000 Conference in honor of Roger Temam, Paris

2000 French-Czech Conference on Fluid Dynamics, CIRM, France
2000 Conference in honor of John Heywood, Naples
2000 Newton Institute Workshop on Topological Fluids, Cambridge
2001 Contemporary Challenges in Fluid Mechanics Conference, Italy
2001 Dynamics and Geophysics Workshop, IMA
2001 Applied PDE Special Session, AMS meeting in Irvine
2001 CNRS Workshop on Shear Flow and Turbulence, Paris
2003 Directions in Applied Math, U. of Illinois-Urbana
2003 Workshop on Wavelets, Banff Center, Canada
2003 Conference on PDE and Fluid Dynamics, Northwestern University
2003 Mathematical Fluids Session, AMS-Spain Meeting
2003 PDE and Applications Session, AMS-India Meeting
2004 Fluids Workshop, ENS-Cachan, Paris
2004 SIAM minisymposium Houston
2004 Annual Nebraska Conference for Women in Mathematics
2005 Mathematics Fluid Dynamics Workshop, AIM
2005 Stability and Control Workshop, Oberwolfach
2005 Conference on PDE, Poznan, Poland
2006 Geophysical Fluids Workshop, A.I.M.
2006 Chicago PDE Days, Northwestern University
2006 Conference for 70th Birthday of Ya. Sinai, U. of Maryland
2006 Conference on Mathematical Fluid Dynamics, Steklov Institute, Moscow
2006 Conference in honor of Ladyzhenskaya and Oleinik, MSRI
2006 Mathematical Fluid Dynamics Workshop, Bernoulli Institute, Lausanne
2007 Conference in honor of Paulo Galdi, Lisbon
2007 300th Euler Centenary, Euler Institute, St. Petersburg
2007 Nonlinear Conservation Laws Session, AMS DePaul Meeting
2007 PDEs of Evolution Type Session, AMS Warsaw Meeting
2008 Geophysical Fluid Dynamics Session, AMS-Indiana Meeting
2008 Conference for 85th Birthday of Cathleen Morawetz, Fields Institute
2008 Conference for 70th Birthday of George Sell, York University
2008 Session on Nonlinear PDE, joint AMS-Shanghai Meeting, China
2009 Southern California Meeting on Fluid Dynamics, UCSB
2009 PIMS conference on Regularity Problems in Hydrodynamics, Vancouver, Canada
2009 Maxwell Institute Conference on Fluid Stability, Edinburgh, Scotland
2009 AIM Workshop on the Euler and SQG equations, Palo Alto
2009 Deterministic and Stochastic PDE Session, AMS-Baylor Meeting
2010 Conference on PDE of Fluids, University of Warwick
2010 Interdisciplinary PDE Session, AMS-Notre Dame Meeting
2011 Southern California Fluids Conference, U.C. Riverside
2011 SIAM PDE Conference, San Diego
2011 Conference in honor of Peter Constantin, Carnegie-Mellon University
2012 CRM Workshop on geometry and dynamics of fluids, Montreal
2012 IAS Workshop on symplectic dynamics and fluid dynamics, Princeton
2012 Advances in mathematical analysis of PDEs, Mittag-Leffler Institute, Stockholm
2012 Workshop on topological fluid mechanics, Isaac Newton Institute, Cambridge
2012 Mathematical aspects of hydrodynamics, Oberwolfach, Germany
2012 Midwest PDE Conference, Memphis
2013 AIM Workshop, Stochastic Fluid Dynamics, Palo Alto
2013 Analysis of dynamics of fluids, AMS-Colorado Meeting

2013	Mathematical Fluids Session, Guanajuato, Mexico
2013	Mathematical Fluids Workshop, Stanford
2013	Red Raider Symposium, Texas Tech
2014	Topics in PDE session, Joint Meetings, Baltimore
2014	Mathematical Fluids, AIMS Conference, Madrid
2014	Nonlinear PDE session, AMS Meeting, San Francisco
2015	AWM Research Symposium, University of Maryland
2015	Mathematical Fluids, AMS Meeting, Las Vegas
2015	Deterministic and Stochastic Fluids, SIAM Meeting, Arizona
2016	PDEs of Fluids, JMM Meeting, Seattle
2016	Advances in Hydrodynamics, BIRS, Banff
2016	Mixing and Nonlinear Stability, AIM Workshop
2016	Nonlinear and Stochastic PDEs, AMS Meeting, Denver
2017	Turbulent Dissipation, Mixing and Predictability, IPAM Workshop
2017	Regularity, Instabilities and Turbulence, ICERM Workshop
2017	Nonlinear and Stochastic PDE Session, MCA2017, Montreal
2017	Equations of Fluid Mechanics Session, MCA 2017, Montreal
2017	Incompressible Fluid Dynamics Session, MCA 2017, Montreal
2017	Geometrical and Statistical Fluid Dynamics Workshop, Simon Center for Geometry and Physics
2018	Analysis of Nonlinear PDE session, JMM, San Diego
2018	HYP-2018, Penn State Conference
2018	Georgia Tech Conference in honor of Jalal Shatah
2018	SCAPED, UCSD
2018	Regularity and Blow-up of Navier-Stokes Type PDE, BIRS, Banff
2018	Reflections on Mathematical Fluids, University of Virginia
2018	KUMUNU Plenary Speaker, Columbia Missouri
2019	Clifford Symposium Speaker, Tulane
2019	Fluids AMS Session, UCR
2019	SIAM, APDE Conference, 2 lectures, La Quinta
2020	Fluids Workshop, Fields Institute, Toronto (Zoom)
2021	Hong Kong - Los Angeles Symposium on PDE (Zoom)
2021	MCA Session on PDE, Buenos Aires (Zoom)
2022	Geometry and Fluids Workshop, Simons Center, Stony Brook (Zoom)
2022	Distinguished Lecturer, Arizona State (Zoom)
2022	Fluid Dynamics Workshop, AIM
2023	Workshop for Ebin's 80th Birthday, Stony Brook (Zoom)
2023	Fluids Reunion, MSRI
2023	PDEs in Fluids, BIRS (Zoom)
2024	Fluid Dynamics, Geometry and Computer Science in Interaction, CRM in Barcelona.

University Service:

UIC:

1975-	Applied Mathematics Committee
1978-82, 84-89	Advisory Committee
1983-85, 88-89	Colloquium Chairman
1984-89, 94-97, 00-03	Faculty Appointments Committee Chair, 1995-96, 1999-00, 2005-06

USC:

2008-2023	Faculty Search Committee
2008-2012	College Promotion and Tenure Committee
2008-2009	Department Merit Committee
2011-2012	Department Merit Committee
2014	Program Review, Computer Science Department
2021-2022	Math Department Review Committee

Promotion Committees:

Juhi Jiang	Full Professor (Math)
Liang Chen	Full Professor (QCB)
Stanislav Minsker	Associate Professor (Math)
Yu Deng	Associate Professor (Math)

Ph.D Students Supervised:

Natasa Pavlovic	Ph.D 2002, UIC
Yevegeny Goncharov	Ph.D 2003, UIC
Natalya Popova	Ph.D 2005, UIC
David St John	Ph.D 2009, UIC

Thesis Committees:

Nathan Glatt-Holtz	Ph.D 2008, USC
George Chamoun	Ph.D 2009, USC
Vlad Vicol	Ph.D 2009, USC
Michaela Ignatova	Ph.D 2010, USC
Fangxu Jing	Ph.D 2011, USC
Vitalli Ostrovsky	Ph.D 2013, USC
Gregory Sokolov	Ph.D 2014, USC
Giusy Mazzone	Ph.D 2015, U. Pitt
Yangyang Huang	Ph.D 2016, USC
Calum Rickard	Ph.D 2021, USC
Lingfeng Li	Ph.D 2022, USC
Jiaqi Liu	Ph.D 2024, USC

Postdoctoral Fellows Mentored:

Andrei Lyashenko, UIC
Roman Shvydkoy, UIC
Alexey Cheskidov, UIC
Alexsey Polunchenko, USC
Walter Rusin, USC
Anthony Suen, USC
Christian Zillinger, USC
Gerrit Welper, USC
Tam Do, USC
Haitian Yue, USC
Yu Deng (tenure track), USC
Qingtang Su, USC
Wojciech Ozanski, USC
Trevor Leslie, USC

Publications

1. Spin-down in a rotating stratified fluid, Part I, Stud. Appl. Math. LIII, 111-136 (1974).

2. Interaction of vortices on the surface of a rotating sphere, Tellus *27*, 15-24 (1975).

3. Quasi-steady flows of a rotating stratified fluid in a sphere, J. Fluid Mech., *76*, 209-228 (1976).

4. Limits to tidal control on lunar asymmetry, (with J.V. Smith), Lunar Science VIII, 322-324 (1977).

5. Hydrostatic tidal model for lunar asymmetry, Geophysical and Astrophysical Fluid Dynamics, *15*, 105-122 (1980).

6. *An Introduction to the Mathematical Theory of Geophysical Fluid Dynamics*, Mathematics Studies 41, North-Holland, 282pp (1980).

7. Internal waves in the ocean stratified with variable buoyancy frequency, (with W.L. Siegmann), An. Acad. Brasil Cienc. *53*, 213-221 (1981).

8. Internal waves in a contained rotating stratified fluid, (with W.L. Siegmann), J. Fluid Mech., *114*, 123-156 (1982).

9. Internal waves in a rotating stratified fluid in an arbitrary gravitational field, (with W. Siegmann), Geophys. and Astrophys. Fluid Dynamics, *19*, 267-292 (1982).

10. Turning surface behavior for internal waves subject to general gravitational fields, Geophys. and Astrophys. Fluid Dynamics, *22*, 189-200 (1982).

11. Effects of dissipation on internal waves in a contained rotating stratified fluid, (with W.L. Siegmann), Geophys. and Astrophys. Fluid Dynamics, *27*, 183-216 (1983).

12. Ordinary differential equations and internal waves, Differential and Integral Equations, Proc. 13th Midwest Conf., 36-54 (1985).

13. Internal oscillations in the Earth's fluid core, Geophys. J. of the Roy. Astr. Soc., *80*, 345-361 (1985).

14. Stability of the subseismic wave equation for the Earth's fluid core, Geophys. and Astrphys. Fluid Dynamics, *31*, 151-167 (1985).

15. Internal oscillations in a rotating stratified spherical shell: asymptotic solutions. Geophys. J. of the Roy. Astr., *89*, 637-657 (1987).

16. Hydromagnetic waves in the Earth's fluid core, Geophys. and Astrophys. Fluid Dynamics, *39*, 315-333 (1987).

17. Hydromadnetic waves in the Earth's fluid core. Proceedings of the symposium U 2, 19th General Assembly of I.U.G.G., U2-28, 1510 (1987).

18. Stability and waves in the Earth's fluid core, Proc. Energy Stability and Convection, Pitman Research Notes in Mathematics 168, 325-345 (1988).

19. Asymptotic behaviour of decay rates of internal waves in a rotating stratified spherical shell, Geophys. J. Roy. Astr. Soc., *96*, 245-252 (1989).

20. Conditions for hydromagnetic instabilities in a contained rotating stratified fluid. Geophys. and Astrophys. Fluid Dynamics, *46*, 245-260 (1989).

21. Viscous decay of core oscillations. Proceedings of the S.E.D.I. Symposium, Terra Cognita (1989).

22. Hydromagnetic waves in a differentially rotating stratified spherical shell, Geophys. and Astrophys. Fluid Dynamics, *48*, 53-67 (1989).

23. Nonlinear stability for stratified magnetohydrodynamics, (with M.M. Vishik), Geophys. and Astrophys. Fluid Dynamics, *55*, 19-45 (1990).

24. Lax pair formulation for the Euler equation, (with M.M. Vishik), Physics Letters A, *148* no. 6, 7 313-319 (1990).

25. Instability criteria for the flow of an inviscid incompressible fluid, (with M.M. Vishik), Phys. Rev. Lett., *66* no. 17, 2204-2206 (1991).

26. Dynamo theory, vorticity generation and exponential stretching, (with M.M. Vishik), Chaos, vol. 1, no. 2, 198-205 (1991).

27. Instability criteria in fluid dynamics, (with M.M. Vishik), Topological Methods in Fluid Dynamics, ed. H.K. Moffatt, NATO AS1 *218*, 535-549 (1992).

28. Instability criteria for steady flows of a perfect fluid, (with M.M. Vishik), Chaos, vol. 2, no. 3, 455-460 (1992).

29. An inverse scattering treatment for the flow of an ideal fluid in two dimensions, (with M.M. Vishik), Nonlinearity, *6*, 231-249 (1993).

30. Dynamo theory methods for hydrodynamical stability, (with M.M. Vishik), J. Math Pure et Appliques, *72*, 145-180 (1993).

31. Hydrodynamic instability for certain ABC flows (with A.D. Gilbert and M.M. Vishik), Geophys Astrophys. Fluid Dyn., *73*, 97-107 (1993).

32. On stability and instability criteria for magnetohydrodynamics, (with M.M. Vishik), Chaos, vol. 5, no. 2, 416-423 (1995).

33. Nonlinear instability in hydrodynamics of an ideal fluid (with W. Strauss and M.M. Vishik), Annales I.H.P, J. Nonlineaire, *14*, 2, 187-209 (1997).

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