Dmitry Efim PELINOVSKY

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Education

1997 Ph.D. in Applied and Computational Mathematics
Monash University (Australia); R. Grimshaw, Yu.S. Kivshar (advisors)
"Asymptotic Methods in Soliton Theory"

1993 M.S. in Applied Physics and Applied Mathematics
Nizhny Novgorod State University (Russia); Yu.A. Stepanyants (advisor)
"Resonant Processes of Soliton Decay in the KP Wave Model"

Positions

2010-now Professor, McMaster University

2014 Chair-of-Excellence Research Professor, University of Grenoble (France)

2013 CNRS Research Professor, University of Montpellier (France)

2004-2010 Associate Professor, McMaster University

2006-2007 Humboldt Research Fellow, University of Stuttgart (Germany)

2000-2004 Assistant Professor, McMaster University

1998-2000 NATO Science Postdoctoral Fellow, University of Toronto

1997 Research Fellow, University of Cape Town (South Africa)

Awards, Grants and Fellowships

2015 Oberwolfach Workshop Grant: "*Partial Differential Equations on Graphs*", Mathematisches Forschungsinstitut Oberwolfach (Germany), $ 20,000 (2017).

2015 London Mathematical Society Research Fellowship : "*Stability of periodic waves in reduced Ostrovsky equations*", University College London (England), $ 3,000 (2015).

2015 Alexander von Humboldt Foundation Research Follow-Up Fellowship : "*Nonlinear waves on periodic quantum graphs*", University of Stuttgart (Germany), $ 10,000 (2015).

2014 NSERC Individual Discovery Research Grant: "*Nonlinear wave propagation in lattices*", McMaster University (Canada), $ 140,000 (2014–2019).

2014 Chair-of-Excellence Research Fellowship, University of Grenoble (France), $ 30,000 (2014).

2013 CNRS Visiting Fellowship, University of Montpellier (France), $ 15,000 (2013).

2012 Oberwolfach Workshop Grant: "*Lattice Differential Equations*", Mathematisches Forschungsinstitut Oberwolfach (Germany), $ 20,000 (2013).

2012 Russian Federation Ministry of Education and Science Grant "*Discrete and continuous models in hydrodynamics*", Nizhny Novgorod State Technical University (Russia), $20,000 (2012-2013).

2012 London Mathematical Society Research Fellowship : "*Justification of reduced models for counter-propagating waves*", University of Loughborough (England), $ 3,000 (2012).

2012 BIRS Workshop Grant: "*Spectral analysis, stability, and bifurcation in modern nonlinear physical systems*", Banff International Research Station (Canada), $ 20,000 (2012).

2011 NSERC Individual Discovery Research Grant: "*Evolution of localized modes in nonlinear dispersive equations*", McMaster University (Canada), $ 130,000 (2011–2016).

2011 Alexander von Humboldt Foundation Research Follow-Up Fellowship : "*Short-pulse propagation in Maxwell equations: finite time blow-up and regularizations*", University of Stuttgart (Germany), $ 10,000 (2011).

2011 FIELDS Workshop Grant: "*Wave breaking and global solutions in the short-pulse dispersive equations*", Fields Institute (Canada), $ 12,000 (2011).

2010 MITACS Strategic Fellowship (Elevate): "*Wavelet methods for optimal control problems in pharmaceutical research*", McMaster University (Canada) (P.I. Wei Zhao), $ 80,000 (2010-2012).

2009 Visiting SSHN Fellowship (Ambassade de France au Canada): "*Front and pulses in nonlinear lattices*", University of Grenoble (France), $ 5,000 (2009).

2006 NSERC Individual Discovery Research Grant: "*Traveling localized waves in discrete lattices*", McMaster University (Canada), $ 135,000 (2006–2010).

2006 Alexander von Humboldt Foundation Research Fellowship : "*Modelling of nonlinear periodic media with continuous and discrete nonlinear evolution equations*", University of Stuttgart (Germany), $ 35,000 (2006-2007).

2006 EPSRC Research Fellowship : "*Localized modes in nonlinear lattices*", University of Bristol and Warwick University (England), $ 20,000 (2006-2007).

2005 Advanced Level Fellowship SSHN (Ambassade de France au Canada): "*Persistence of traveling waves in discrete lattices*", Institute Non Linearire de Nice (France), $ 5,000 (2005).

2004 PREA (Premium Research Excellence Award): "*Stability of Bose–Einstein condensates in optical lattices*", McMaster University (Canada), $ 150,000 (2004-2009).

2003 SHARCnet Graduate Scholarship Grant: "*Fast computations of eigenvalues in spectral stability problems*", McMaster University (Canada) (P.I. M. Chugunova), $ 44,000 (2003-2005).

2003 NSERC Leadership Support Initiative Grant: "*Nonlinear partial differential equations and their applications*", McMaster University (Canada) (P.I. W. Craig), $ 160,000 (2003-2007).

2002 EPSRC Visiting Fellowship: "*Long-time dynamics of localized structures in the modified NLS and MTM equations*", Loughborough University (UK), $ 10,000 (2002-2003)

2002 CFI/OIT (New Opportunities Fund) Research Grant: "*Computing infrastructure for mathematical research in fiber and photonic optics*", McMaster University (Canada), $ 159,258 (2002-2005).

2001 NSERC Individual Discovery Research Grant: "*Dispersion management in nonlinear optics*", McMaster University (Canada), $ 105,000 (2001–2016).

Teaching Experience (last ten years)

2015-2016 Mathematical Physics I (Math3C03)
Advanced Differential Equations (Math3F03)
Complex Analysis II (Math4X03/6X03)

2014-2015 Discrete Dynamical Systems and Chaos (Math3DC3)
Numerical Explorations (Math3Q03)
Mathematical Physics I (Math3C03)

2012-2013 Methods of Applied Mathematics II (graduate, Math742)
Numerical Explorations (Math3Q03)
Vector Calculus (Math2A03)

2011-2012 Methods of Applied Mathematics II (graduate, Math742)
Numerical Explorations (Math3Q03)

2010-2011 Topics in Mathematical Physics (graduate, Math748)
Discrete Dynamical Systems and Chaos (Math3DC3)

2009-2010 Advanced Differential Equations (graduate, Math743)
Partial Differential Equations (Math3FF3)

2008-2009 Linear Algebra II (Math2R03)
Numerical Linear Algebra (Math2T03)

2007-2008 Methods of Applied Mathematics I (ODEs) (graduate, Math741),
Engineering Mathematics II (Math2M03)
Numerical Methods for Differential Equations (Math4Q03)

Monographs, Textbooks, Coursewares

2015 Courseware "**How to solve problems of Mathematical Physics**", McMaster Textbook for course Math3C03, with lecture notes and exercises, 80pp.

2014 Courseware "**Numerical Methods with MATLAB**", McMaster Textbook for course Math3Q03, with lecture notes and exercises, 200pp.

2011 Monograph "**Localization in Periodic Potentials: from Schrödinger operators to the Gross–Pitaevskii equation**", Cambridge University Press, 398pp.

2008 Textbook "**Numerical Mathematics**" (with M. Grasselli), Jones and Bartlett Publishers, 668pp.

Postdoctoral fellows

2014-2016 Dr. Jaime Foster, Postdoctoral Fellow, Interfaces in slow diffusion equations, moved to Lecturer, University of Portsmouth (England)

2014-2015 Dr. Gaukhar Shaikhova, Exchange Postdoctoral Fellow, Bifurcations and stability of nonlinear waves on quantum graphs, returned to Astana University, Kazahstan

2012-2014 Dr. Andres Contrera, Postdoctoral Fellow, Orbital stability of solitary waves, moved to Assistant Professor, New Mexico State University (USA)

2010-2012 Dr. Wei Alan Zhao, Postdoctoral Fellow, Wavelet methods in pharmaceutical research, moved to Senior Manager at Manulife Financial

2009-2010 Dr. Juan Belmonte-Beitia, Exchange Postdoctoral Fellow, Gross-Pitaevskii equation with sign-varying nonlinearity, moved to Lecturer, returned to University of Castilla-La Mancha, Spain

2007-2009 Dr. Clement Gallo, Postdoctoral Fellow, Nonlinear waves in Bose–Einstein condensates, moved to Assistant Professor, University of Montpellier, France

2005-2007 Dr. Ranis Ibragimov, Postdoctoral Fellow, Navier–Stokes equations and shallow water solitons, moved to Assistant Professor at New Mexico Institute of Mining and Technology, New Mexico, USA

2002-2004 Dr. Vitaly Vougalter, Postdoctoral Fellow, Spectral theory of linearized NLS problems, moved to Postdoctoral Fellow, University of Toronto

2001-2002 Dr. Henrik Kalisch, Postdoctoral Fellow, Modelling of dispersion-managed solitons, moved to Postdoctoral Fellow, Lund University (Sweden)

Graduate students

2015-2017 Jin Li, M.Sc. Thesis, Stability in integrable systems with commuting linear operators, in progress

2014-2018 Alexander Chernyavsky, Ph.D. Thesis, Stability of nonlinear waves in PT-symmetric Hamiltonian lattices, in progress

2013-2014 Kivilcim Alkan, Ph.D. student, Dynamics of nonlinear waves in logarithmic KdV equation, moved to Ph.D. program of University of Ankara, Turkey

2013-2015 Amjad Khan, M.Sc. Thesis, Approximations of nonlinear waves on lattices, moved to Ph.D. program at University of Western Ontario.

2012-2016 Yusuke Shimabukuro, Ph.D. student, Analysis of nonlinear Dirac and derivative NLS equations, in progress

2011-2012 Mostafa Abdi, M.Sc. Project, Vortices in rotating harmonic potentials, moved to M. Business program at McMaster University

2010-2012 Matthew Betti, M.Sc. Student, Traveling waves in granular crystals, moved to Ph.D. program at University of Western Ontario

2010-2012 Dmitry Ponomarev, M.Sc. Student, Justification of the NLS equation for self-written polymers, moved to Ph.D. program at University of Nice (France)

2009-2013 Anton Sakovich, Ph.D. Student, Discrete solitons and breathers in anti-continuum limit, moved to Research Associate position in Ottawa

2007-2009 Ahmed Hassan Abdelrazec, M.Sc. Student, Convergence of the Adomian iterative method, moved to Ph.D. program at York University

2007-2009 Anton Sakovich, M.Sc. Student, Well-posedness of the wave equation in characteristic coordinates, moved to Ph.D. program at McMaster University

2004-2009 Dmitry Agueev, Ph.D. Student, Rigorous derivation and analysis of coupled-mode equations, moved to a computer firm (Toronto)

2003-2007 Marina Chugunova, Ph.D. Student, Analysis and computations of eigenvalues in spectral stability problems, moved to Postdoctoral Fellow at University of Toronto

2002-2004 Dmitry Agueev, M.Sc. Student, Modeling of three-dimensional photonic crystals, moved to Ph.D. program at McMaster University

2001-2003 Clayton Webster, M.Sc. Student, Numerical modelling of waveguide interface, moved to Ph.D. program at Florida State University, USA

Undergraduate students

2015-2016 Peter Gysberg, B. Sc. Physics Project, Self-similar solutions for reversing interfaces in slow diffusion equations

2012-2013 Chengzhu Xu, B. Sc. Mathematics Project, Blow-up of velocity of a fluid flow near a contact line

2011-2012 James Dowdall, NSERC USRA, Symmetry-breaking bifurcations in PT-symmetric systems

2010-2011 Matthew Coles, B.Sc. Physics Project, Bifurcations of Bloch waves in cavities

2010-2011 Daniel Badali (UTM), Alex Kulik (Kharkov), and Steven Pollack (McGill), MITACS–Fields Summer Undergraduate program, Bifurcation analysis of steady states in rimming flows with surface tension

2009-2010 James Brown, B.Sc. Physics Project, Numerical approximations of localized modes in periodic potentials

2009-2010 Matthew Coles, NSERC USRA, Excited states in Bose–Einstein condensates

2008-2009 Peter Foltin, NSERC USRA, Propagation failure in nonlinear lattices

2007-2008 Mike Lukas, NSERC USRA, Symbolic comutations of discrete 3D vortices

2005-2006 Marcella Fioroni, USF of HRSD, Iterative methods for bound states

2002-2003 Yourik Hacoupian, CFI/OIT grant, Software development in photonic optics

Editorial Work

2014-2019 Associated Editor of the journal "Studies in Applied Mathematics" published by the John Wiley & Sons.

2013-2014 Editor of the book "*Spectral Analysis, Stability and Bifurcations in Nonlinear Physical Systems*" published by Wiley-ISTE (with O. Kirillov)

2011-2016 Member of the Editorial Board of the journal "Physical Review A" published by the American Institute of Physics

2011-2013 Member of the Editorial Board of the journal "Discontinuity, Nonlinearity, and Complexity" published by L. & H Scientific Publishing Company

2010-2012 Guest Editor of the special issue of the journal "Discrete and Continuous Dynamical Systems - Series S" (with M. Stanislavova, and A. Stefanov) on "Discrete and continuous nonlinear waves in physics"

2009-2013 Associate Editor of the journal "Communications in Nonlinear Science and Numerical Simulations" published by Elsevier

2009-2010 Invited Editor of the special issue of the journal "Applicable Analysis" (with A. Pankov) on "Mathematics of nonlinear lattices"

2008-2013 Member of the Editorial Board of the journal "Advances in Mathematical Physics" published by Hindawi Publishing Corporation

2008-2012 Member of the Advisory Board for the book series entitled "Lecture Notes on Nonlinear Physical Science" published by Higher Education of China and Springer

2007-2010 Member of the Editorial Board for the journal "Transactions of Nonlinear Science and Complexity" published by World Scientific

2004-2005 Invited Editor of the special issue of the journal "Chaos" (with R. Grimshaw, L. Ostrovsky) on "Solitary waves in non-integrable systems"

Conference Organization (last ten years)

2017 Organizer of a workshop "Nonlinear Partial Differential Equations on Graphs" (with R. Fukuizumi, J. Marzuola, G. Schneider) (Oberwolfach, Germany)

2016 Organizer of a mini-workshop on "Photonics and Resonances" at LMS Durham Research Symposium "Mathematical and Computational Aspects of Maxwell's Equations" (Durham, England)

2016 Organizer of minisymposium "Lattice dynamics: wave propagation and continuum approximation" (with J.D. Wright) at SIAM conference on Nonlinear Waves and Coherent Structures (Philadelphia, USA).

2016 Member of the Scientific Committee at the CMS Summer conference (Edmonton, Canada).

2015 Organizer of the minisymposium on "Nonlinear waves in dispersive equations" (with N. Visciglia) at the conference Equadiff-2015 (Lyon, France).

2015 Member of Scientific Committee on "Theoretical and Computational Photonics" at the Conference on Lasers and Electro-Optics Europe (CLEO/Europe) and European Quantum Electronics Conference (EQEC) (Munich, Germany).

2015 Theme leader of "Applied Analysis and Dynamical Systems" (with X. Zou and D. Iron) at the AMMCS-CAIMS 2015 Meeting (Kitchener Canada)

2014 Organizer of the special session on "Integrable systems: recent progress" (with S. Anco) at the CMS Winter Meeting (Hamilton, Canada)

2014 Organizer of the minisymposium on "Integrable systems: analysis, geometry, and applications" (with S. Anco) at the SIAM Conference on Nonlinear Waves and Coherent Structures (Cambridge, UK)

2014 Organizer of the minisymposium on "Nonlinear waves in lattices with microstructure" (with G. James) at the 10th AIMS conference on Dynamical Systems, Differential Equations and Applications (Madrid, Spain)

2013 Organizer of the workshop on "Lattice Differential Equations" (with G. James, Z. Rapti, and G. Schneider), (Oberwolfach, Germany)

2013 Organizer of the minisymposium "Nonlinear waves in PT-symmetric potentials" in the Third International Conference on Nonlinear Waves (Beijing, China)

2013 Member of the Scientific Committee on the Eighth IMACS conference on Nonlinear Evolution Equations (Athens, Georgia).

2012 Organizer of the workshop on "Spectral analysis, stability, and bifurcation in modern nonlinear physical systems" (with O. Kirillov, P. Binding, T. Bridges, Y. Fukumoto, I. Hoveijn), (Banff International Research Station, Canada)

2012 Member of the Scientific Committee of The 3rd NY Applied Mathematics Conference, RPI, Troy, NY (USA)

2012 Organizer of the minisymposium "Nonlinear waves in nonlocal media" (with V. Rothos) in SIAM conference on Nonlinear Waves and Coherent Structures (Seattle, USA)

2011 Organizer of the workshop on "Wave breaking and global solutions in the short-pulse dispersive equations" (Fields Institute, Canada).

2011 Organizer of the minisymposium "Nonlinear waves in lattices" (with H.J. Hupkes) in EquaDiff 2011 (Loughborough, England)

2011 Member of the Scientific Committee of The 2nd NY Applied Mathematics Conference, Buffalo, NY (USA)

2011 Organizer of the minisymposium "Long-time dynamics of solitary waves" (with T. Mizumachi) in the Seventh IMACS conference on Nonlinear Evolution Equations (Athens, Georgia)

2011 Member of the Scientific Committee on the Seventh IMACS conference on Nonlinear Evolution Equations (Athens, Georgia).

2010 Organizer of the minisymposium "Continuous and discrete dynamical systems in physics" (with A. Stefanov) in the 8th AIMS conference on Dynamical Systems, Differential Equations and Applications, (Dresden, Germany)

2010 Organizer of the special session "Stability in nonlinear partial differential equations" (with S. Gustafson) in the CMS Summer Meeting (St.John's, NB)

2009 Member of the Scientific Committee on the Sixth IMACS conference on Nonlinear Evolution Equations (Athens, Georgia).

2008 Organizer of the minisymposium "Justification of asymptotic reductions in space-periodic media" (with G. Schneider) in SIAM conference on Nonlinear Waves and Coherent Structures (Rome, Italy).

2008 Organizer of the minisymposium "Mathematical modeling of nonlinear structures in Bose–Einstein condensates" (with V. Konotop) in the Second Conference on "Nonlinear Science and Complexity" (Porto, Portugal).

2008 Member of the Scientific Committee of the Second Conference on "Nonlinear Science and Complexity" (Porto, Portugal).

2007 Organizer of the workshop on "Recent Advances in Functional and Delay Differential Equations" (with H. Brunner and A.R. Humphries) (Halifax, Nova Scotia).

2007 Organizer of the minisymposium "Nonlinear waves in lattices and periodic potentials" (with A. Champneys) in SIAM conference on Applications of Dynamical Systems (Snowbird, Utah).

2007 Member of the Scientific Committee on the Fifth IMACS conference on Nonlinear Evolution Equations (Athens, Georgia).

Committees (last ten years)

2015–2016 Member of Faculty Appointments Advisory Committee at Faculty of Science

2015–2016 Member of the Computer Committee at the Department of Mathematics

2014–2015 Member of the Graduate Curriculum Committee at Department of Mathematics.

2012–2013 Member of the Undergraduate Curriculum Committee and Colloquium Chair at Department of Mathematics.

2008–2012 Associate Chair (Undergraduate Studies), Chair of the Undergraduate Curriculum, Chair the Publicity and Liaison Committees at Department of Mathematics.

Invited Addresses at Conferences and Workshops (last ten years)

Jul 2015 Session "Lattice dynamical systems", International Conference quadiff-2015, Lyon, France

Jun 2015 Session "Nonlinear Dispersive PDEs" at AMMCS-CAIMS 2015 Summer Meeting, Waterloo, Canada

May 2015 Session "Wave propagation in highly nonlinear dispersive media" SIAM Conference on Applications of Dynamical Systems, Snowbird, USA

Dec 2014 Session "Nonlinear PDEs of Mathematical Physics", CMS Winter Meeting, Hamilton, Canada

Aug 2014 Sessions "Stability of Nonlinear Waves" and "Nonlinear waves in PT-symmetric systems", SIAM Conference on Nonlinear Waves and Coherent Structures, Cambridge, UK.

July 2014 Sessions "Nonlinear waves in materials with microstructure" and "Nonlinear Schrödinger equations", 10th AIMS Conference on Dynamical Systems, Differential Equations, and Applications, Madrid, Spain.

May 2014 Summer school and Workshop on "Stability of Nonlinear Waves", Pisa, Italy.

Mar 2014 Workshop on "Mathematical Methods and Models in Laser Filamentation", CRM, Montreal, Canada

Sep 2013 Workshop on "Modified Dispersive Evolution Equations", Wolfang Pauli Institute, Vienna, Austria

Sep 2013 Workshop on "Lattice Differential Equations", Oberwolfach, Germany

July 2013 Invited speaker at the International Conference on Dynamics, Bifurcations, and Strange Attractors, Nizhny Novgorod State University, Nizhny Novgorod, Russia

June 2013 Session "Nonlinear waves in PT-symmetric potentials" at the 3rd International Conference on Nonlinear Waves, Tsinshua University, Beijing, China

Mar 2013 Session "Stability of nonlinear waves" at the 8th Conference on Nonlinear Evolution Equations and Wave Phenomena, University of Athens, GA, USA

Mar 2013 Invited Speaker at the International Conference on Dynamics of Differential Equations, GeorgiaTech, Atlanta, USA

Dec 2012 Workshop on "Lattices and Nonlocal Dynamical Systems and Applications", IMA, Minneapolis, USA

Nov 2012 Workshop on "Spectral analysis, stability, and bifurcation in modern nonlinear physical systems", BIRS, Banff, Canada

Sept 2012 Session "*Nonlinear PDEs in Physical and Biological Systems*" in the 1082nd AMS (Sectional) Meeting, Rochester, USA

Sept 2012 Workshop *Nonlinear waves in fluids*, Loughborough (UK)

Aug 2012 Conference *Spectral Theory and Differential Equations*, Khrakov (Ukraine)

July 2012 Workshop *Localized excitations in nonlinear complex systems*, Seville (Spain)

June 2012 Sessions "*Non-self-adjoint spectral problems*" and "*Granular crystals*" in the SIAM conference on Nonlinear Waves and Coherent Structures, Seattle, WA (USA)

Mar 2012 Workshop *Vortices and solitons in classical and quantum fluids*, CIRM, Luminy, Marseille (France)

Jan 2012 Sessions "*Stability Analysis for Infinite Dimensional Hamiltonian Systems*" and "*Nonlinear Hyperbolic PDEs*" in Joint Mathematics Meeting, Boston, MA (USA)

Dec 2011 Session "*Nonlinear PDEs and applications*" in the CMS Winter Meeting, Toronto, ON (Canada)

Nov 2011 Sessions "*Nonlinear wave phenomena*" and "*Self-organization phenomena and geometric structures of concentration in PDEs*" in SIAM conference on Analysis of Partial Differential Equations, San Diego, CA (USA)

Aug 2011 Session "*Exponentially small phenomena*" in EQUADIFF-2011, Loughborough (England)

May 2011 Sessions "*Discrete and continuous waves*" and "*Weakly and strongly nonlinear dynamics in lattice differential equations*" in SIAM conference on Applications of Dynamical Systems, Snowbird, UT (USA)

Apr 2011 The 2nd NY Applied Mathematics Conference, Buffalo, NY (USA)

Apr 2011 Session "*Discrete and continuous integrable systems*" in the 7th IMACS Conference "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA (USA)

Nov 2010 Session "*Nonlinear evolution equations*" in the AMS Central Sectional Meeting, South Bend, IN (USA)

Aug 2010 Sessions "*Waves in inhomogeneous media*" and "*Highly nonlinear phenomena*" in the SIAM conference on Nonlinear Waves and Coherent Structures, Philadelphia (USA)

July 2010 Workshop *Solitary waves and related topics*, Kyushu University, Fukuoka (Japan)

July 2010 Workshop *Harmonic analysis and partial differential equations*, Kyoto University (Japan)

June 2010 Session "*Stability in nonlinear partial differential equations*" in the CMS Summer Meeting, Fredericton, NB (Canada)

May 2010 Sessions "*Nonlinear evolution equations and applications*" and "*Nonlinear Schrodinger equation*" in the Eighth AIMS Conference on Dynamical Systems, Differential Equations and Applications, Dresden (Germany)

Nov 2009 Workshop "*Lattice dynamical systems*", Brown University, Providence, RI (USA)

Aug 2009 Workshop "*Analysis of nonlinear wave equations and applications in engineering*" Banff, AB (Canada)

July 2009 Workshop "*Localized excitations in nonlinear complex systems*" Seville (Spain)

June 2009 Sessions "*Mathematical Physics*" and "*Reaction-diffusion equations and their applications*" in the CMS Summer Meeting, St. John's, NF (Canada)

Apr 2009 Session "*Effective dynamics and interactions of localized structures in Schrodinger-type equations*" in the 1050th AMS Meeting, Worcester, MA (USA)

Mar 2009 Sessions "*Nonlinear Schrodinger equations and its applications*" and "*Spectral theory for linearizations of discrete and continuous nonlinear waves*" in the 6th IMACS Conference "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA (USA)

Feb 2009 Workshop "*Pulses and modulations in nonlinear systems*" Stuttgart (Germany)

Sept 2008 Workshop "*Gross–Pitaevskii equation with a periodic potential*", Wolfgang Pauli Institute, Vienna (Austria)

Aug 2008 Workshop "*Waves in Fluids II*", Paraty, RJ (Brazil)

July 2008 Session "*Mathematical modeling of nonlinear structures in Bose–Einstein condensates*" in the Second Conference on Nonlinear Science and Complexity, Porto (Portugal)

July 2008 Sessions "*Stability and instability of coherent structures in dispersive wave equations*" and "*Justification of asymptotic reductions in space-periodic media*" in the SIAM conference on Nonlinear Waves and Coherent Structures, University of Rome, Rome (Italy)

June 2008 Session "*Variational and Numerical Methods in Geometry, Physics and Chemistry*" in the Second Canada–France Congress, Montreal (Canada)

May 2008 Sessions "*Nonlinear evolution equations and applications*" and "*Long-time behavior of Hamiltonian and dissipative systems*" in the Seventh AIMS Conference on Dynamical Systems, Differential Equations and Applications, Arlington, Texas (USA)

Nov 2007 Workshop "*Recent Advances in functional and delay differential equations*", Halifax, Canada

Oct 2007 Workshop "*Hamiltonian Lattice Dynamical Systems*", Leiden, Netherlands

July 2007 Session "*Strongly-nonlinear phenomena in optical and/or periodic media*" in International Congress on Industrial and Applied Mathematics, Zurich (Switzerland)

July 2007 Sessions "*Photonic crystals*" and "*Stability of solitary waves*" in Conference "*Dynamics Days Europe*", Loughborough (UK)

June 2007 Conference "*Symmetry in Nonlinear Mathematical Physics*", Kiev (Ukraine)

May 2007 Session "*Continuum Descriptions of Discrete Systems*" in SIAM conference on Applications of Dynamical Systems, Snowbird, UT (USA)

Mar. 2007 Workshop "Nonlinear Physics in Periodic Structures and Metamaterials", Dresden (Germany)

Jan. 2007 Conference "Nonlinear lattice dynamics: from localization to statistical behaviour", Cuernavaca (Mexico)

Jan. 2007 Session "*Initial- and Boundary-value problems, solvability and stability for some nonlinear PDEs: Theorem, Computation, and Application*" in Joint Mathematics Meeting, New Orleans (USA)

Invited Seminars (last ten years)

Nov 2015 University of Pittsburg, USA, A. Veinstein

Jul 2015 University of Stuttgart, Germany, G. Schneider

Jun 2015 University of Bath, England, K. Matthius

May 2015 University of Reading, England, B. Peloni

May 2015 University College London, England, T. Johnson

Apr 2015 University of North Carolina at Chapel Hill, USA, J. Marzuola

Mar 2015 Claremont Graduate University, USA, M. Chugunova

Feb 2015 University of Washington, Seattle, USA, B. Deconinck

Jan 2015 Los Alamos National Laboratory, USA, A. Saxena

Jul 2014 University of Granada (Spain), P. Torres

Apr 2014 University of Stelenbosch (South Africa), H. Weigert

Apr 2014 University of Cape Town (South Africa), I. Barashenkov

Apr 2014 University of Besanscon (France), N. Boussand

Mar 2014 University of Geneva (Switzerland), A. Boritchev

Feb 2014 University of Grenoble (France), Th. Gallay

Dec 2013 University of New Mexico (USA), P. Lushnikov

Nov 2013 University of Cergy–Pontoise (France), N. Tsvetkov

Oct 2013 University of Trieste (Italy), S. Cuccagna

Oct 2013 University of Montpellier (France), R. Carles

July 2013 Institute of Applied Physics, Nizhny Novgorod (Russia), A. Slyunyaev

June 2013 Nizhny Novgorod State Technical University (Russia), A. Kurkin

June 2012 University of Nottingham (England), J. Wattis

June 2012 University of Surrey (England), T. Bridges

June 2012 University of Loughborough (England), K. Khusnutdinova

Apr 2012 University of Tennessee at Knoxville (USA), T. Phan

Feb 2012 University of Michigan at Ann Arbor (USA), C. Doering

July 2011 University of Hannover (Germany), M. Earnstream

June 2011 Schrödinger Institute for Mathematical Physics, Vienna (Austria), A. Constantin

July 2010 Kyushu University (Japan), T. Mizumachi

Apr 2010 University of British Columbia (Canada), T.P. Tsai

June 2009 University of Grenoble (France), G. James

June 2009 Institute of Henri Poincare, Paris (France), F. Merle

Mar 2009 Department of Mathematics, McGill University, Montreal, Canada, T. Humphries

Nov 2008 Department of Mathematics, University of Arizona, Tucson, AZ, USA, J. Lega

Oct 2008 Department of Mathematics, McGill University, Montreal, Canada, T. Humphries

Apr 2008 Department of Mathematics, University of Kansas, KA, USA, E. VanVleck

Feb 2008 Department of Mathematics, University of SUNY Buffalo, NY, USA, G. Biondini

Dec 2007 Department of Mathematics, Ecole Polytechnique, Lausanne, Switzerland

Apr 2007 Department of Mathematics, University of Orsay, France, J.C. Saut

Feb 2007 Department of Mathematics, University of Loughborough, UK, K. Khusnutdinova

Feb 2007 Department of Mathematics, University of Leeds, UK, A. Fordi

Feb 2007 Department of Mathematics, University of Surrey, UK, T. Bridges

Feb 2007 Department of Mathematics, University of Warwick, UK, R. MacKay

Jan 2007 Department of Mathematics, University of Besancon, France, M. Maris

Life-time Publications

Books - **2**; Articles in Books and Reviews - **5**; Invited Articles - **16**; Articles in Journals - **180**; Articles in Proceedings - **20**; E-articles - **1**; Encyclopedia Entries - **8**.

Monographs, Textbooks

1. D. Pelinovsky, "*Localization in Periodic Potentials: From Schrödinger operators to the Gross–Pitaevskii equation*", Cambridge University Press, (2011), 403pp.

2. M.Grasselli and D. Pelinovsky, "*Numerical Mathematics*", Jones and Bartlett Publishers, (2008), 668pp.

Publications (last ten years)

1. S. Alama, L. Bronsard, A. Contreras, and D.E. Pelinovsky, Domains walls in the coupled Gross-Pitaevskii equations, Archives for Rational Mechanics and its Applications **215**, 579–615 (2015)

2. P.G. Kevrekidis, D.E. Pelinovsky, and A. Saxena, When linear stability does not exclude nonlinear instability, Physical Review Letters **114**, 214101 (6 pages) (2015)

3. I.V. Barashenkov, D.E. Pelinovsky, and P. Dubard, Dimer with gain and loss: Integrability and PT-symmetry restoration, Journal of Physics A: Math. Theor. **48**, 325201 (28 pages) (2015)

4. B.A. Malomed and D.E. Pelinovsky, Persistence of the Thomas-Fermi approximation for ground states of the Gross-Pitaevskii equation supported by the nonlinear confinement, Applied Mathematics Letters **40**, 45–48 (2015)

5. D.E. Pelinovsky and C. Xu, On numerical modelling and the blow-up behavior of contact lines with a 180-degree contact angle, Journal of Engineering Mathematics **92**, 31–44 (2015)

6. D.E. Pelinovsky, D.A. Zezyulin, and V.V. Konotop, Global existence of solutions to coupled PT-symmetric nonlinear Schrodiger equations, International Journal of Theoretical Physics **54**, 3920–3931 (2015)

7. D. Noja, D. Pelinovsky, and G. Shaikhova, Bifurcations and stability of standing waves in the nonlinear Schrodinger equation on the tadpole graph, Nonlinearity **28**, 2343–2378 (2015)

8. T. Gallay and D.E. Pelinovsky, Orbital stability in the cubic defocusing NLS equation. Part I: Cnoidal periodic waves, Journal of Differential Equations **258**, 3607–3638 (2015)

9. T. Gallay and D.E. Pelinovsky, Orbital stability in the cubic defocusing NLS equation. Part II: The black soliton, Journal of Differential Equations **258**, 3639–3660 (2015)

10. E. Dumas and D.E. Pelinovsky, Justification of the log-KdV equation in granular chains: the case of precompression, SIAM J. Math. Anal. **46**, 4075–4103 (2014)

11. D.E. Pelinovsky and Y. Shimabukuro, Orbital stability of Dirac solitons, *Letters in Mathematical Physics* **104**, 21–41 (2014)

12. D.E. Pelinovsky and D.V. Ponomarev, Justification of a nonlinear Schrodinger model for laser beams in photopolymers, *Z. Angew. Math. Phys.* **65**, 405–433 (2014)

13. A. Contreras and D.E. Pelinovsky, Stability of multi-solitons in the cubic NLS equation, *Journal of Hyperbolic Differential Equations* **11**, 329–353 (2014)

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