List of publications: Dmitry E. Pelinovsky

Books:

(1) D. Noja and D.E. Pelinovsky (editors), *Symmetries of Nonlinear PDEs on Metric Graphs and Branched Networks*, Symmetry (MDPI, Basel) (2019)

(2) O.N. Kirillov and D.E. Pelinovsky (editors), *Nonlinear Physical Systems: Spectral Analysis, Stability, and Bifurcations* (Wiley-ISTE, NJ) (2014)

(3) D.E. Pelinovsky, *Localization in Periodic Potentials: from Schrödinger Operators to the Gross-Pitaevskii Equation* (Cambridge University Press, Cambridge) (2011)

(4) M. Grasseli and D.E. Pelinovsky, *Numerical Mathematics* (Jones and Bartlett, Boston) (2008)

Special issues:

(1) D. Bambusi, S. Kuksin, D.E. Pelinovsky, and Y. Yi (editors), *Hamiltonian Dynamical Systems: Special issue devoted to Walter Craig*, Journal of Dynamics and Differential Equations, in preparation (2020)

(2) K.R. Khusnutdinova and D.E. Pelinovsky (editors), *Nonlinear waves in fluids in honor of Roger Grimshaw on the occasion of his 80th birthday*, Studies in Applied Mathematics **142**, 215–510 (2019)

(3) D. Pelinovsky, M. Stanislavova, and A. Stefanov (editors), *Recent progress on the long time behavior of coherent structures in discrete and continuous models*, Discrete and Continuous Dynamical Systems S **5**, 879–1010 (2012)

(4) A. Pankov and D.E. Pelinovsky (editors), *Mathematics of nonlinear lattices*, Applicable Analysis **89**, 1313–1556 (2010)

(5) R. Grimshaw, L. Ostrovsky, and D.E. Pelinovsky (editors), *Solitary waves in non-integrable systems*, Chaos **15**, 037101–037115 (2005)

Articles in Books:

(1) A. Chernyavsky, P.G. Kevrekidis, and D.E. Pelinovsky, Krein signature in Hamiltonian and PT-symmetric systems, *Parity-time Symmetry and Its Applications*, Editors: D. Christodoulides and J. Yang, *Springer Tracts in Modern Physics* **280** (Springer, New York) 465–491 (2019)

(2) D.E. Pelinovsky, "Asymptotic reductions of the Gross–Pitaevskii equation", in *Emergent Nonlinear Phenomena in Bose–Einstein Condensates*, Eds. P.G. Kevrekidis, D.J. Franzeskakis, and R. Carretero–Gonzalez (Springer–Verlag, New York, 2008), 377–398.

(3) Yu.S. Kivshar and D.E. Pelinovsky, Self-Focusing and Transverse Instabilities of Solitary Waves, *Physics Reports* **331**, 117–195 (2000)

(4) D.E. Pelinovsky and R.H.J. Grimshaw, Asymptotic Methods in Soliton Stability Theory, *Advances in Fluid Mechanics Series, 12: Nonlinear Instability Analysis*, Edited by L.Debnath and S.R.Choudhury, (Computational Mechanics Publications, Southampton, Boston), 245–312 (1997)

Articles in Journals:

(1) A. Geyer and D.E. Pelinovsky, Spectral instability of the peaked periodic wave in the reduced Ostrovsky equation, *Proceedings of AMS*, accepted (2020)

(2) F. Natali and D.E. Pelinovsky, Instability of H^1-stable peakons in the Camassa-Holm equation, *Journal of Differential Equations*, accepted (2020)

(3) J. Chen and D.E. Pelinovsky, Periodic travelling waves of the modified KdV equation and rogue waves on the periodic background, *Journal of Nonlinear Science*, accepted (2020)

(4) T. Dohnal and D.E. Pelinovsky, Bifurcation of nonlinear bound states in the periodic Gross-Pitaevskii equation with PT-symmetry, *Proceedings of the Royal Society of Edinburgh A*, accepted (2020)

(5) P. Bizon, D. Hunik-Kostyra, and D.E. Pelinovsky, Stationary states of the cubic conformal flow on $\mathbf{S}^3$, *Discrete Continuous Dynamical Systems A* **40**, 1–32 (2020)

(6) P. Bizon, D. Hunik-Kostyra, and D.E. Pelinovsky, Ground state of the conformal flow on $\mathbf{S}^3$, *Communications in Pure and Applied Mathematics* **72**, 1123–1151 (2019)

(7) A. Geyer and D.E. Pelinovsky, Linear instability and uniqueness of the peaked periodic wave in the reduced Ostrovsky equation, *SIAM Journal of Mathematical Analysis* **51**, 1188–1208 (2019)

(8) U.Le and D.E. Pelinovsky, Convergence of Petviashvili's method near periodic waves in the fractional Korteweg-de Vries equation, *SIAM Journal of Mathematical Analysis* **51**, 2850–2883 (2019)

(9) A. Kairzhan, D.E. Pelinovsky, and R.H. Goodman, Drift of spectrally stable shifted states on star graphs, *SIAM Journal of Applied Dynamical Systems* **18**, 1723–1755 (2019)

(10) H. Huh and D.E. Pelinovsky, Nonexistence of self-similar blowup for the nonlinear Dirac equations in (1+1) dimensions, *Applied Mathematics Letters* **92**, 176–183 (2019)

(11) G.L. Alfimov, A.S. Korobeinikov, C.J. Lustri, and D.E. Pelinovsky, Standing lattice solitons in the discrete NLS equation with saturation, *Nonlinearity* **32**, 3445–3484 (2019)

(12) N. Joshi and D.E. Pelinovsky, Integrable semi-discretization of the massive Thirring system in laboratory coordinates, *Journal of Physics: Mathematical Theoretical* **52**, 03LT01 (12pp) (2019)

(13) T. Xu and D.E. Pelinovsky, Darboux transformation and soliton solutions of the semi-discrete massive Thirring model, *Physics Letters A* **383**, 125948 (14 pages) (2019)

(14) D.E. Pelinovsky and Y. Shimabukuro, Existence of global solutions to the derivative NLS equation with the inverse scattering transform method, *International Mathematics Research Notices* **2018** 5663-5728 (2018)

(15) A. Kairzhan and D.E. Pelinovsky, Spectral stability of shifted states on star graphs, *Journal of Physics A: Mathematical Theoretical* **51**, 095203 (23 pages) (2018)

(16) A. Kairzhan and D.E. Pelinovsky, Nonlinear instability of half-solitons on star graphs, *Journal of Differential Equations* **264**, 7357-7383 (2018)

(17) A. Chernyavsky and D.E. Pelinovsky, Krein signature for instability of PT-symmetric states, *Physica D* **371**, 48-59 (2018)

(18) A. Contreras, D.E. Pelinovsky, and M. Plum, Orbital stability of domain walls in coupled Gross-Pitaevskii systems, *SIAM Journal of Mathematical Analysis* **50**, 810-833 (2018)

(19) J.M. Foster, P. Gysbers, J.R. King, and D.E. Pelinovsky Bifurcations of self-similar solutions for reversing interfaces in the slow diffusion equation with strong absorption, *Nonlinearity* **31**, 4621–4648 (2018)

(20) J. Chen and D.E. Pelinovsky, Rogue periodic waves in the focusing nonlinear Schrodinger equation, *Proceeding of Royal Society of London A* **474**, 20170814 (18 pages) (2018)

(21) J. Chen and D.E. Pelinovsky, Rogue periodic waves in the modified KdV equation, *Nonlinearity* **31**, 1955-1980 (2018)

(22) D.E. Pelinovsky, Normal form for transverse instability of the line soliton with a nearly critical speed of propagation, *Math. Model. Nat. Phenom.* **13**, 23 (20 pages) (2018)

(23) D.E. Pelinovsky and Yu.A. Stepanyants, Helical solitons in vector modified Korteweg-de Vries equations, *Physics Letters A* **382**, 3165–3171 (2018)

(24) G.A. Gottwald and D.E. Pelinovsky, On the impossibility of solitary Rossby waves in meridionally unbounded domains, *Physics of Fluids* **30**, 116601 (7 pages) (2018)

(25) A. Geyer and D.E. Pelinovsky, Spectral stability of periodic waves in the generalized reduced Ostrovsky equation, *Letters in Mathematical Physics* **107**, 1293–1314 (2017)

(26) M. Haragus, J. Li, and D.E. Pelinovsky, Counting unstable eigenvalues in Hamiltonian spectral problems via commuting operators, *Communications in Mathematical Physics* **354**, 247–268 (2017)

(27) D.E. Pelinovsky and G. Schneider, Bifurcations of standing localized waves on periodic graphs, *Annales Henri Poincaré* **18**, 1185–1211 (2017)

(28) D.E. Pelinovsky, A. Saalmann, and Y. Shimabukuro, The derivative NLS equation: global existence with solitons, *Dynamics of PDE* **14**, 271–294 (2017)

(29) D.E. Pelinovsky, On the linearized log-KdV equation, *Communications in Mathematical Sciences* **15**, 863–880 (2017)

(30) A. Khan and D. Pelinovsky, Long-time stability of small FPU solitary waves, *Discrete Continuous Dynamical Systems Series A* **37**, 2065–2075 (2017)

(31) P.G. Kevrekidis and D.E. Pelinovsky, On the characterization of vortex configurations in the steady rotating Bose-Einstein condensates, *Proceeding of Royal Society of London A* **473**, 2017060 (17 pages) (2017)

(32) E. Destyl, S.P. Nuiro, D.E. Pelinovsky, and P. Poullet, Coupled pendula chains under parametric PT-symmetric driving force, *Physics Letters A* **381**, 3884–3892 (2017)

(33) C. Garcia-Azpeitia and D.E. Pelinovsky, Bifurcations of multi-vortex configurations in rotating Bose-Einstein condensates, *Milan Journal of Mathematics* **85**, 331–367 (2017)

(34) S.N. Alekseenko, M.V. Dontsova, and D.E. Pelinovsky, Global solutions to the shallow-water system with a method of an additional argument, *Applicable Analysis* **96**, 1444–1465 (2017)

(35) A. Chernyavsky and D.E. Pelinovsky, Breathers in Hamiltonian PT-symmetric chains of coupled pendula under a resonant periodic force, *Symmetry* **8**, 59 (26 pages) (2016)

(36) A. Chernyavsky and D.E. Pelinovsky, Long-time stability of breathers in Hamiltonian PT-symmetric lattices, *Journal of Physics A: Mathematical Theoretical* **49**, 475201 (20 pages) (2016)

(37) J. Cuevas-Maraver, P.G. Kevrekidis, and D.E. Pelinovsky, Nonlinear instabilities of multi-site breathers in Klein-Gordon lattices, *Studies in Applied Mathematics* **137**, 214–237 (2016)

(38) A. Contreras, D.E. Pelinovsky, and Y. Shimabukuro, L2 orbital stability of Dirac solitons in the massive Thirring model, *Communications in PDEs* **41**, 227–255 (2016)

(39) D. Pelinovsky and Y. Shimabukuro Transverse instability of line solitary waves in massive Dirac equations, *Journal of Nonlinear Science* **26**, 365–403 (2016)

(40) J.M. Foster and D.E. Pelinovsky, Self-similar solutions for reversing interfaces in the slow diffusion equation with strong absorption, *SIAM Journal of Applied Dynamical Systems* **15**, 2017–2050 (2016)

(41) S. Gilg, D.E. Pelinovsky and G. Schneider, Validity of the NLS approximation for periodic quantum graphs, *Nonlinear Differential Equations and Applications* **23**, 63 (30 pages) (2016)

(42) E.R. Johnson and D. Pelinovsky, Orbital stability of periodic waves in the class of reduced Ostrovsky equations, *Journal of Differential Equations* **261**, 3268–3304 (2016)

(43) D.E. Pelinovsky, T. Penati, and S. Paleari, Approximation of small-amplitude weakly coupled oscillators by discrete nonlinear Schrödinger equations, *Review in Mathematical Physics* **28**, 1650015 (25 pages) (2016)

(44) J. Marzuola and D.E. Pelinovsky, Ground states on the dumbbell graph, *Applied Mathematics Research Express* **2016**, 98–145 (2016)

(45) H. Xu, P.G. Kevrekidis, and D.E. Pelinovsky, Existence and stability of PT-symmetric states in nonlinear two-dimensional square lattices, *Physica D* **326**, 1–20 (2016)

(46) P.G. Kevrekidis, J. Cuevas-Maraver, and D.E. Pelinovsky, Energy criterion for the spectral stability of discrete breathers, *Physical Review Letters* **117**, 094101 (5 pages) (2016)

(47) 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)

(48) 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)

(49) 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)

(50) 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)

(51) 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)

(52) 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)

(53) 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)

(54) 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)

(55) 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)

(56) 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)

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

(58) 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)

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

(60) S. Cuccagna and D.E. Pelinovsky, The asymptotic stability of solitons in the cubic NLS equation on the line, *Applicable Analysis* **93**, 791–822 (2014)

(61) G. James and D.E. Pelinovsky, Gaussian solitary waves and compactons in Fermi-Pasta-Ulam lattices with Hertzian potentials, *Proceedings of Royal Society A* **470**, 20130465 (20 pages) (2014)

(62) R. Carles and D.E. Pelinovsky, On the orbital stability of Gaussian solitary waves in the log-KdV equation, *Nonlinearity* **27**, 3185–3202 (2014)

(63) D.E. Pelinovsky, D. A. Zezyulin, and V.V. Konotop, Nonlinear modes in a generalized PT-symmetric discrete nonlinear Schrodinger equation, *Journal of Physics A: Math. Theor.* **47**, 085204 (20pp) (2014)

(64) G.L. Alfimov, E.V. Medvedeva, and D.E. Pelinovsky, Wave systems with an infinite number of localized travelling waves, *Physical Review Letters* **112**, 054103 (5 pages) (2014)

(65) C. Gallo and D.E. Pelinovsky, On the Thomas-Fermi approximation of the ground state in a PT-symmetric confining potential, *Stud. Appl. Math.* **133**, 398–421 (2014)

(66) K.R. Khusnutdinova, K.R. Moore, and D.E. Pelinovsky, Validity of the weakly-nonlinear solution of the Cauchy problem for the Boussinesq-type equation, *Studies in Applied Mathematics* **133**, 52–83 (2014)

(67) R. Grimshaw and D.E. Pelinovsky, Global existence of small-norm solutions in the reduced Ostrovsky equation, *Discrete Continuous Dynamical Systems Series A* **34**, 557–566 (2014)

(68) D.E. Pelinovsky, E.A. Rouvinskaya, O.E. Kurkina, and B. Deconinck, Short-wave transverse instabilities of line solitons of the two-dimensional hyperbolic nonlinear Schrodinger equation, *Theoretical Mathematical Physics* **179**, 452–461 (2014)

(69) D. Pelinovsky and G. Schneider, Rigorous justification of the short-pulse equation, *Nonlinear Differential Equations and Applications* **20**, 1277–1294 (2013)

(70) M. Betti and D.E. Pelinovsky, Periodic travelling waves in dimer granular chains, *Journal of Nonlinear Science* **23**, 689–711 (2013)

(71) D.E. Pelinovsky and J. Yang, On transverse stability of discrete line solitons, *Physica D* **255**, 1–11 (2013)

(72) D.E. Pelinovsky and P.G. Kevrekidis, Bifurcations of asymmetric vortices in symmetric harmonic traps, *Applied Mathematics Research Express* **2013** 127–164 (2013)

(73) P.G. Kevrekidis, D.E. Pelinovsky, and D.Y.Tyugin, Nonlinear stationary states in PT-symmetric lattices, *SIAM Journal of Applied Dynamical Systems* **12**, 1210–1236 (2013)

(74) P.G. Kevrekidis, D.E. Pelinovsky, and D.Y.Tyugin, Nonlinear dynamics in PT-symmetric lattices, *Journal of Physics A: Mathematical Theoretical* **46**, 365201 (17 pages) (2013)

(75) D.E. Pelinovsky, P.G. Kevrekidis, and D.J. Frantzeskakis, PT-symmetric Lattices with extended gain/loss are generically unstable, *European Physics Letters* **101**, 11002 (6 pages) (2013)

(76) V. Achilleos, D.J. Frantzeskakis, P.G. Kevrekidis, and D.E. Pelinovsky, Matter-wave bright solitons in spin-orbit coupled Bose-Einstein condensates, *Physical Review Letters* **110**, 264101 (5 pages) (2013)

(77) D. Pelinovsky, E. Pelinovsky, E. Kartashova, T. Talipova, and A. Giniyatulin, Universal power law for the energy spectrum of breaking Riemann waves, *JETP Letters* **98**, 237–241 (2013)

(78) W. Zhao and D.E. Pelinovsky, Multilevel computations of dispersed drug release, *Numerical Methods for Partial Differential Equations* **29**, 1391–1415 (2013)

(79) D. Pelinovsky and A. Sakovich, Multi-site breathers in KleinGordon lattices: stability, resonances, and bifurcations, *Nonlinearity* **25**, 3423–3451 (2012)

(80) T. Mizumachi and D. Pelinovsky, Backlund transformation and L2-stability of NLS solitons, *International Mathematics Research Notices* **2012**, 2034–2067 (2012)

(81) D.E. Pelinovsky and A. Stefanov, Asymptotic stability of small gap solitons in the nonlinear Dirac equations, *Journal of Mathematical Physics* **53**, 073705 (27 pages) (2012)

(82) D. Pelinovsky, Sharp bounds on enstrophy growth in the viscous Burgers equation, *Proceedings of Royal Society A* **468**, 3636–3648 (2012)

(83) D. Pelinovsky, Enstrophy growth in the viscous Burgers equation, *Dynamics of Partial Differential Equations* **9**, 305–340 (2012)

(84) V.V. Konotop, D.E. Pelinovsky, and D.A. Zezyulin, Discrete solitons in PT-symmetric lattices, *European Physics Letters* **100**, 56006 (6 pages) (2012)

(85) D.E. Pelinovsky and T.Phan, Normal form for the symmetry-breaking bifurcation in the nonlinear Schrodinger equation, *J. Diff. Eqs.* **253**, 2796–2824 (2012)

(86) G. James and D. Pelinovsky, Breather continuation from infinity in nonlinear oscillator chains, *DCDS A* **32**, 1775–1799 (2012)

(87) M. Coles and D. Pelinovsky, Loops of energy bands for Bloch waves in optical lattices, *Stud. Appl. Math.* **128**, 300–336 (2012)

(88) D.E. Pelinovsky, G. Simpson, and M.I. Weinstein, Broad band solitons in a periodic and nonlinear Maxwell system, *SIAM J. Appl. Dynam. Syst.* **11**, 478–506 (2012)

(89) C. Chong, D.E. Pelinovsky, and G. Schneider, On the validity of the variational approximation in discrete nonlinear Schrodinger equations, *Physica D* **241**, 115–124 (2012)

(90) T. Dohnal and D. Pelinovsky, Vortex families near a spectral edge in the Gross-Pitaevskii equation with a two-dimensional periodic potential, *Phys. Rev. E* **85**, 026605 (6 pages) (2012)

(91) D.E. Pelinovsky and A.R. Giniyatullin, Finite-time singularities in the dynamical evolution of contact lines, *Bulletin of the Moscow State Regional University (Physics and Mathematics)* **2012 N.3**, 14–24 (2012)

(92) I. Didenkulova, D.E. Pelinovsky, D. Tyugin, A. Giniyatullin, and E.N. Pelinovsky, Travelling long waves in water rectangular channels of variable cross section, *Bulletin of the Moscow State Regional University (Earth Science)* **2012 N.5**, 89–93 (2012)

(93) C. Gallo and D. Pelinovsky, On the Thomas-Fermi ground state in a harmonic potential, Asymptotic Analysis **73**, 53–96 (2011)

(94) D. Pelinovsky, Traveling monotonic fronts in the discrete Nagumo equation, Journal of Dynamics in Differential Equations **23**, 167-183 (2011)

(95) H.J.Hupkes, D.E. Pelinovsky, and B. Sandstede, Propagation failure in the discrete Nagumo equation, Proceedings of the AMS **139**, 3537-3551 (2011)

(96) E.W. Kirr, P.G. Kevrekidis, and D.E. Pelinovsky, Symmetry-breaking bifurcation in the nonlinear Schrödinger equation with symmetric potentials, Commun. Math. Phys. **308**, 795-844 (2011)

(97) D. Pelinovsky and A. Sakovich, Internal modes of discrete solitons near the anti-continuum limit of the dNLS equation, Physica D **240**, 265-281 (2011)

(98) A. Abdelrazec and D. Pelinovsky, Convergence of the Adomian decomposition method for initial-value problems, Numerical Methods for PDEs **27**, 749–766 (2011)

(99) D.E. Pelinovsky and P.G. Kevrekidis, Variational approximations of trapped vortices in the large-density limit, Nonlinearity **24**, 1271–1289 (2011)

(100) D. Badali, M. Chugunova, D.E. Pelinovsky, and S. Pollack, Regularized shock solutions in coating flows with small surface tension, Physics of Fluids **23**, 093103 (8 pp) (2011)

(101) O.N. Kirillov, D.E. Pelinovsky, and G. Schneider, Paradoxical transitions to instabilities in hydromagnetic Couette–Taylor flows, Physical Review E **84**, 065301(R) (2011)

(102) D. Pelinovsky and A. Sakovich, Global well-posedness of the short-pulse and sine-Gordon equations in energy space, Communications in PDE **35**, 613-629 (2010)

(103) Y. Liu, D. Pelinovsky, and A. Sakovich, Wave breaking in the Ostrovsky-Hunter equation, SIAM Journal of Mathematical Analysis **42**, 1967-1985 (2010)

(104) D. Pelinovsky, Asymptotic properties of excited states in the Thomas-Fermi limit, Nonlinear Analysis **73**, 2631–2643 (2010)

(105) M.P. Coles, D.E. Pelinovsky, and P.G. Kevrekidis, Excited states in the Thomas-Fermi limit: a variational approach, Nonlinearity **23**, 1753–1770 (2010)

(106) M. Chugunova and D. Pelinovsky, Count of eigenvalues in the generalized eigenvalue problem, Journal of Mathematical Physics **51**, 052901 (19 pages) (2010)

(107) D. Pelinovsky and G. Schneider, Bounds on the tight-binding approximation for the Gross-Pitaevskii equation with a periodic potential, Journal of Differential Equations **248**, 837-849 (2010)

(108) R. Grimshaw, D. Pelinovsky, and E. Pelinovsky, Homogenization of the variable-speed wave equation, Wave Motion **47**, 496–507 (2010)

(109) R. Ibragimov and D. Pelinovsky, "Effects of rotation on stability of viscous stationary flows on a spherical surface", Physics of Fluids **22**, 126602 (10 pages) (2010)

(110) P.G. Kevrekidis and D.E. Pelinovsky, Distribution of eigenfrequencies for oscillations of the ground state in the Thomas-Fermi limit, Physical Review A **81**, 023627 (5 pages) (2010)

(111) J. Belmonte-Beitia and D. Pelinovsky, Bifurcation of gap solitons in periodic potentials with a periodic sign-varying nonlinearity coefficient, Applicable Analysis, **89**, 1335–1350 (2010)

(112) P.G. Kevrekidis, D.E. Pelinovsky, and A. Stefanov, Asymptotic stability of small solitons in the discrete nonlinear Schrodinger equation in one dimension, *SIAM Journal of Mathematical Analysis* **41**, 2010-2030 (2009)

(113) Yu. Liu, D. Pelinovsky, and A. Sakovich, Wave breaking in the short-pulse equation, *Dynamics in PDEs* **6**, 291–310 (2009)

(114) T. R. O. Melvin, A. R. Champneys, and D. E. Pelinovsky, Discrete traveling solitons in the Salerno model, *SIAM J. Appl. Dyn. Syst.* **8**, 689–709 (2009).

(115) M. Chugunova and D.E. Pelinovsky, On quadratic eigenvalue problems arising in stability of discrete vortices, *Linear Algebra Appl.* **431**, 962–973 (2009).

(116) R.N. Ibragimov and D.E. Pelinovsky, Incompressible viscous fluid flows in a thin spherical shell, *J. Math. Fluid Mech.* **11**, 60–90 (2009)

(117) T. Dohnal, D. Pelinovsky and G. Schneider, Coupled-mode equations and gap solitons in a two-dimensional nonlinear elliptic problem with a separable periodic potential, *Journal of Nonlinear Science* **19**, 95–131 (2009)

(118) C. Gallo and D.E. Pelinovsky, Eigenvalues of a nonlinear ground state in the Thomas-Fermi approximation, J. Math. Anal. Appl. **355**, 495-526 (2009)

(119) D. Pelinovsky, G. Schneider, and R. MacKay, Justification of the lattice equation for a nonlinear elliptic problem with a periodic potential, *Communications in Mathematical Physics* **284**, 803–831 (2008)

(120) D. Pelinovsky and G. Schneider, Moving gap solitons in periodic potentials, *Math. Meth. Appl. Sci.* **31**, 1739–1760 (2008)

(121) T. Dohnal and D. Pelinovsky, Surface gap solitons at a nonlinearity interface, *SIAM J. Appl. Dynam. Syst.* **7**, 249–264 (2008)

(122) D. Pelinovsky and P. Kevrekidis, Periodic oscillations of dark solitons in parabolic potentials, *AMS Contemporary Mathematics* **473**, 159–180 (2008)

(123) D.E. Pelinovsky and P.G. Kevrekidis, Dark solitons in external potentials, *Z. angew. Math. Phys.* **59**, 559–599 (2008)

(124) P. Panayotaros and D. Pelinovsky, Periodic oscillations of discrete NLS solitons in the presence of diffraction management, *Nonlinearity* **21**, 1265-1279 (2008)

(125) M. Chugunova and D. Pelinovsky, Spectrum of a non-self-adjoint operator associated with the periodic heat equation, *J. Math. Anal. Appl.* **342**, 970–988 (2008)

(126) D.E. Pelinovsky and A. Stefanov, On the spectral theory and dispersive estimates for a discrete Schrodinger equation in one dimension, *Journal of Mathematical Physics* **49**, 113501 (17pp) (2008)

(127) M. Lukas, D. Pelinovsky, and P.G. Kevrekidis, Lyapunov-Schmidt reduction algorithm for three-dimensional discrete vortices, *Physica D* **237**, 339-350 (2008)

(128) D.E. Pelinovsky and P.G. Kevrekidis, Stability of discrete dark solitons in nonlinear Schrodinger lattices, *J. Phys. A: Math. Gen.* **41**, 185206 (10pp) (2008)

(129) R.N. Ibragimov and D.E. Pelinovsky, Three-dimensional gravity waves in a channel of variable depth, *Comm. Nonlin. Sci. Numer. Simul.* **13**, 2104–2113 (2008)

(130) A.A. Sukhorukov, A.V. Lavrinenko, D.N. Chigrin, D.E. Pelinovsky, and Yu.S. Kivshar, Shaping slow-light pulses in coupled periodic waveguides, *Journal of Optical Society of America B* **25**, C65-C74 (2008)

(131) G. Biondini and D. Pelinovsky, Kadomtsev-Petviashvili equation, Scholarpedia **3**(10) : 6539 (2008)

(132) D.E. Pelinovsky, T.R.O. Melvin and A.R. Champneys, One-parameter localized traveling waves in nonlinear Schrodinger lattices, *Physica D* **236**, 22–43 (2007)

(133) M. Chugunova and D.E. Pelinovsky, Two-pulse solutions in the fifth-order KdV equation: rigorous theory and numerical approximations, *Discr. Cont. Dyn. Syst. B* **8**, 773–800 (2007)

(134) D. Pelinovsky and G. Schneider, Justification of the coupled-mode approximation for a nonlinear elliptic problem with a periodic potential, *Applic. Anal.* **86**, 1017–1036 (2007)

(135) A. Comech, S. Cuccagna, and D.E. Pelinovsky, Nonlinear instability of a critical traveling wave in the generalized Korteweg–de Vries equation, *SIAM J. Math. Anal.* **39**, 1–33 (2007)

(136) G. Iooss and D.E. Pelinovsky, Normal form for travelling kinks in discrete Klein-Gordon lattices, *Physica D* **216**, 327–345 (2006)

(137) S. Cuccagna, E. Kirr, and D. Pelinovsky, Parametric resonance of ground states in the nonlinear Schrodinger equation, *J. Diff. Eqs.* **220**, 85–120 (2006)

(138) M. Klaus, D.E. Pelinovsky, and V.M. Rothos, Evans function for Lax operators with algebraically decaying potentials, *J. Nonlin. Sci.* **16**, 1–44 (2006)

(139) O.F. Oxtoby, D.E. Pelinovsky, and I.V. Barashenkov, Travelling kinks in discrete phi-4 models, *Nonlinearity*, **19**, 217-235 (2006)

(140) A. Tovbis and D.E. Pelinovsky, Exact conditions for existence of homoclinic orbits in the fifth-order KdV model, *Nonlinearity* **19**, 2277-2312 (2006)

(141) D.E. Pelinovsky, Translationally invariant nonlinear Schr"odinger lattices, *Nonlinearity*, **19**, 2695–2716 (2006)

(142) M. Chugunova and D. Pelinovsky, Block-diagonalization of the symmetric first-order coupled-mode system, *SIAM J. Appl. Dyn. Syst.* **5**, 66-83 (2006)

(143) P.G. Kevrekidis, D. Pelinovsky, and A. Stefanov, Nonlinearity management in higher dimensions, *J.Phys. A: Math. Gen.* **39**, 479–488 (2006)

(144) V. Vougalter and D. Pelinovsky, Eigenvalues of zero energy in the linearized NLS problem, *Journal of Mathematical Physics* **47**, 062701 (2006)

(145) B. Deconinck, D.E. Pelinovsky, and J.D. Carter, Transverse instabilities of deep-water solitary waves, *Proceedings of the Royal Society A* **462**, 2039–2061 (2006)

(146) P.G. Kevrekidis and D.E. Pelinovsky, Discrete vector on-site vortices, *Proceedings of the Royal Society A* **462**, 2671–2694 (2006)

(147) M. Porter, M. Chugunova, and D.E. Pelinovsky, Feshbach resonance management of Bose-Einstein condensates in optical lattices, *Phys. Rev. E* **74**, 036610 (2006)

(148) A.S. Desyatnikov, D.E. Pelinovsky, and J. Yang, Multi-component vortex solutions in symmetrically coupled nonlinear Schrödinger equations, [Russian edition: *Fundamentalnaya i prikladnaya matematika* **12**, 35–63 (2006)].

(149) D.E. Pelinovsky, P.G. Kevrekidis, and D. Frantzeskakis, Stability of discrete solitons in nonlinear Schrodinger lattices, *Physica D*, **212**, 1–19 (2005)

(150) D.E. Pelinovsky, P.G. Kevrekidis, and D. Frantzeskakis, Persistence and stability of discrete vortices in nonlinear Schrodinger lattices, *Physica D*, **212**, 20–53 (2005)

(151) D.E. Pelinovsky and V.M. Rothos, Bifurcations of travelling breathers in the discrete NLS equations, *Physica D* **202**, 16-36 (2005)

(152) D. Agueev and D. Pelinovsky, Modeling of wave resonances in low-contrast photonic crystals, *SIAM J. Appl. Math.* **65**, 1101–1129 (2005)

(153) S. Cuccagna, D. Pelinovsky, and V. Vougalter, Spectra of Positive and Negative Energies in the Linearized NLS Problem, *Comm. Pure Appl. Math.* **58**, 1–29 (2005).

(154) D.E. Pelinovsky, Inertia law for spectral stability of solitary waves in coupled nonlinear Schrodinger equations, *Proc. Roy. Soc. Lond. A* **461** 783-812 (2005)

(155) J.R. Salgueiro, Yu.S. Kivshar, D.E. Pelinovsky, V. Simon, and H. Michinel, Spatial vector solitons in nonlinear photonic crystal fibers, *Stud. Appl. Math.* **115**, 157–171 (2005)

(156) D.E. Pelinovsky and J. Yang, Instabilities of multi-hump vector solitons in coupled nonlinear Schrodinger equations, *Stud. Appl. Math.* **115** 109–137 (2005)

(157) Y. Kodama and D. Pelinovsky, Spectral stability and time evolution of N solitons in KdV hierarchy, *J. Phys. A: Math. Gen.* **38**, 6129–6140 (2005)

(158) S. Cuccagna and D. Pelinovsky, Bifurcations from the endpoints of the essential spectrum in the linearized nonlinear Schrödinger problem, *J. Math. Phys.* **46**, 053520 (2005)

(159) V. Zharnitsky and D. Pelinovsky, Averaging of nonlinearity-managed pulses, *Chaos* **15**, 037105 (2005)

(160) D. Pelinovsky and J. Yang, Stability analysis of embedded solitons in the generalized third-order NLS equation, *Chaos* **15**, 037115 (2005)

(161) D.E. Pelinovsky, D. Frantzeskakis, and P.G. Kevrekidis, Oscillations of dark solitons in trapped Bose-Einstein condensates, *Phys. Rev. E* **72**, 016615 (2005)

(162) I.V. Barashenkov, O.F. Oxtoby, and D.E. Pelinovsky, Translationally invariant discrete kinks from one-dimensional maps, *Phys. Rev. E* **72**, 035602(R) (2005)

(163) D.E. Pelinovsky and Yu.A. Stepanyants, Convergence of Petviashvili's Iteration Method for Numerical Approximation of Stationary Solutions of Nonlinear Wave Equations, *SIAM J. Numer. Anal.* **42**, 1110-1127 (2004).

(164) D.E. Pelinovsky and J. Yang, Parametric Resonance and Radiative Decay of Dispersion–Managed Solitons, *SIAM J. Appl. Math.* **64**, 1360–1382 (2004).

(165) D.E. Pelinovsky, A.A. Sukhorukov, and Yu.S. Kivshar, Bifurcations and stability of gap solitons in periodic potentials, Phys. Rev. E **70**, 036618 (2004).

(166) D.E. Pelinovsky, P.G. Kevrekidis, D.J. Frantzeskakis, and V. Zharnitsky, Hamiltonian averaging for solitons with nonlinearity management, Phys. Rev. E **70**, 047604 (2004)

(167) D.E. Pelinovsky and V. Zharnitsky, Averaging of Dispersion–Managed Pulses: Existence and Stability, *SIAM J. Appl. Math.* **63**, 745–776 (2003).

(168) D.E. Pelinovsky and A. Scheel, Spectral analysis of stationary light transmission in nonlinear photonic structures, *J. Non. Sci.* **13**, 347–396 (2003).

(169) A. Comech and D. Pelinovsky, Purely Nonlinear Instability of Standing Waves with Minimal Energy, *Comm. Pure Appl. Math.* **56**, 1565–1607 (2003).

(170) D.E. Pelinovsky, P.G. Kevrekidis, and D.J. Frantzeskakis, Averaging for Solitons with Nonlinearity Management, Phys. Rev. Lett. **91**, 240201 (2003).

(171) J. Yang and D.E. Pelinovsky, Stable Vortex and Dipole Vector Solitons in a Saturable Nonlinear Medium, *Phys. Rev. E* **67**, 016608 (2003).

(172) D. Pelinovsky and D. Wu, Gauge Transformation and Spectral Decomposition for the Ishimori–II equations, *J. Phys. A: Math. Gen.* **36**, 5557–5574 (2003).

(173) W.N. Ye, L. Brzozowski, E.H. Sargent, and D. Pelinovsky, Stable All-optical Limiting in Nonlinear Periodic Structures. III: Non-solitonic Pulse Propagation, *J. Opt. Soc. Am. B* **20**, 695–705 (2003).

(174) K.R. Khusnutdinova and D.E. Pelinovsky, On the Exchange of Energy in Coupled Klein–Gordon Equations, *Wave Motion* **38**, 1–10 (2003).

(175) D.E. Pelinovsky and J. Yang, A Normal Form for Nonlinear Resonance of Embedded Solitons, *Proc. R. Soc. Lond. A* **458**, 1469–1497 (2002).

(176) Y. Tan, J. Yang, and D.E. Pelinovsky, Semi-stability of Embedded Solitons in the General Fifth-order KdV Equation, *Wave Motion* **36**, 241–255 (2002).

(177) D. Pelinovsky, J. Sears, L. Brzozowski, and E.H. Sargent, Stable All-optical Limiting in Nonlinear Periodic Structures. I: Analysis, *J. Opt. Soc. Am. B* **19**, 43–53 (2002).

(178) D. Pelinovsky and E.H. Sargent, Stable All-optical Limiting in Nonlinear Periodic Structures. II: Computations, *J. Opt. Soc. Am. B* **19**, 1873–1889 (2002).

(179) A. Shik, H.E. Ruda, D. Pelinovsky, and W. Craig, Depletion Layers and Contact Capacitance in Non-uniformly Doped Semiconductors, J. Phys. D: Appl. Phys. **35**, 2988-2993 (2002).

(180) R. Grimshaw, D. Pelinovsky, E. Pelinovsky, and A. Slyunyaev, The Generation of Large–Amplitude Solitons from an Initial Disturbance in the Extended Korteweg–de Vries Equation, Chaos **12**, 1070–1076 (2002).

(181) D. Neshev, W. Krolikowski, D.E. Pelinovsky, G. McCarthy, and Yu.S. Kivshar, Transverse Instability of Vector Solitons and Generation of Dipole Arrays, *Phys. Rev. Lett.* **87**, 103903 (2001)

(182) R. Grimshaw, D. Pelinovsky, E. Pelinovsky, and T. Talipova, Wave Group Dynamics in Weakly Nonlinear Long–Wave Models, *Physica D* **159**, 35–57 (2001).

12

(183) D.E. Pelinovsky and C. Sulem, Eigenfunctions and Eigenvalues for a Scalar Riemann–Hilbert Problem Associated to Inverse Scattering, *Comm. Math. Phys.* **208**, 713–760 (2000).

(184) D.E. Pelinovsky and C. Sulem, Spectral Decomposition for the Dirac System Associated to the DSII Equation, *Inverse Problems* **16**, 59–74 (2000).

(185) D.E. Pelinovsky and J. Yang, Internal Oscillations and Radiative Damping of Vector Solitons, *Stud. Appl. Math.* **105**, 245–276 (2000).

(186) D.E. Pelinovsky and T.I. Lakoba, Persistent Oscillations of Scalar and Vector Dispersion-Managed Solitons, *Chaos* **10**, 539–550 (2000).

(187) D.E. Pelinovsky, Instabilities of Dispersion-Managed Solitons in the Normal Dispersion Regime, Phys. Rev. E **62**, 4283–4293 (2000).

(188) D. Pelinovsky, L. Brzozowski, and E.H. Sargent, Transmission Regimes of Periodic Nonlinear Optical Structures, Phys. Rev. E **62**, R4536-R4539 (2000)

(189) D. Pelinovsky and Yu.S. Kivshar, Stability Criterion for Multi-Component Solitary Waves, Phys. Rev. E **62**, 8668–8676 (2000)

(190) N.V. Alexeeva, I.V. Barashenkov, and D.E. Pelinovsky, Dynamics of the Parametrically Driven NLS Solitons Beyond the Onset of the Oscillatory Instability, *Nonlinearity* **12**, 103–140 (1999).

(191) D.E. Pelinovsky, J.E. Sipe, and J. Yang, Generation of Soliton Oscillations in Nonlinear Quadratic Materials, *Phys. Rev. E* **59**, 7250–7253 (1999).

(192) I.V. Barashenkov, D.E. Pelinovsky, and E.V. Zemlyanaya, Vibrations and Oscillatory Instabilities of Gap Solitons, *Phys. Rev. Lett.* **80**, 5117–5120 (1998).

(193) Yu.S. Kivshar, D.E. Pelinovsky, T. Cretegny, and M. Peyrard, Internal Modes of Solitary Waves, *Phys. Rev. Lett.* **80**, 5031–5035 (1998).

(194) I.V. Barashenkov and D.E. Pelinovsky, Exact Vortex Solutions of the Complex Sine-Gordon Theory on the Plane, *Phys. Lett. B* **436**, 117–124 (1998).

(195) D.E. Pelinovsky, Yu.S. Kivshar, and V.V. Afanasjev, Internal Modes of Envelope Solitons, *Physica D* **116**, 121–142 (1998).

(196) D. Pelinovsky, Radiative Effects to the Adiabatic Dynamics of Envelope-Wave Solitons, *Physica D* **119**, 301–320 (1998).

(197) V.V. Voronovich, D.E. Pelinovsky, and V.I. Shrira, On the Internal Wave - Shear Flow Resonance in Shallow Water, *J. Fluid Mech.* **354**, 209–237 (1998).

(198) D. Pelinovsky, Rational Solutions of the KP Hierarchy and the Dynamics of Their Poles. II. Construction of the Degenerate Polynomial Solutions, *J. Math. Phys.* **39**, 5377–5395 (1998).

(199) D.E. Pelinovsky and C. Sulem, Bifurcations of New Eigenvalues for the Benjamin–Ono Equation, *J. Math. Phys.* **39**, 6552–6572 (1998).

(200) D.E. Pelinovsky and R.H.J. Grimshaw, Structural Transformation of Eigenvalues for a Perturbed Algebraic Soliton Potential, *Phys. Lett. A* **229**, 165–172 (1997).

(201) D.E. Pelinovsky and R.H.J. Grimshaw, Instability Analysis of Internal Solitary Waves in a Nearly Uniformly Stratified Fluid, *Phys. Fluids A* **9**, 3343–3352 (1997).

(202) D. Pelinovsky, J. Springael, F. Lambert, and I. Loris, On Modified NLS, Kaup and NLBq Equations: Differential Transformations and Bilinearization, *J. Phys. A: Math. Gen.* **30**, 8705–8717 (1997).

(203) D.E.Pelinovsky, V.V.Afanasjev, and Yu.S.Kivshar, Nonlinear Theory of Oscillating, Decaying, and Collapsing Solitons in the Generalized Nonlinear Schrödinger Equation, *Phys.Rev.E.* **53**, 1940–1953 (1996).

(204) D.E. Pelinovsky, Yu.S. Kivshar, and V.V. Afanasjev, Instability–Induced Dynamics of Dark Solitons, *Phys.Rev.E* **54**, 2015–2032 (1996).

(205) D.E. Pelinovsky and R.H.J. Grimshaw, An Asymptotic Approach to Solitary Wave Instability and Critical Collapse in Long-Wave KdV-Type Evolution Equations, *Physica D* **98**, 139–155 (1996).

(206) A.S. Fokas, R.H.J. Grimshaw, and D.E. Pelinovsky, On the Asymptotic Integrability of a Higher-Order Evolution Equation Describing Internal Waves in a Deep Fluid, *J.Math.Phys.* **37**, 3415–3421 (1996).

(207) D.E. Pelinovsky and R.H.J. Grimshaw, Nonlocal Models for Envelope Waves in a Stratified Fluid, *Stud. Appl. Math.* **97**, 369–391 (1996).

(208) D.E.Pelinovsky and V.G.Yakhno, Generation of Collective-Activity Structures in a Homogeneous Neuron-Like Medium. 1. Bifurcation Analysis of Static Structures, *Int. J. Bifurcation and Chaos* **6**, 81–87 (1996).

(209) D.E.Pelinovsky and V.G.Yakhno, Generation of Collective-Activity Structures in a Homogeneous Neuron-Like Medium. 2. Dynamics of Propagating and Pulsating Structures, *Int. J. Bifurcation and Chaos* **6**, 89–100 (1996).

(210) D.E.Pelinovsky, A.V.Buryak, and Yu.S.Kivshar, Instability of Solitons Governed by Quadratic Nonlinearities, *Phys.Rev.Lett.* **75**, 591–595 (1995).

(211) D.Pelinovsky, Intermediate Nonlinear Schrödinger Equation for Internal Waves in a Fluid of Finite Depth, *Phys.Lett.A* **197**, 401–406 (1995).

(212) D.E.Pelinovsky and V.I.Shrira, Collapse Transformation for Self-Focusing Solitary Waves in Boundary-Layer Type Shear Flows, *Phys.Lett.A* **206**, 195–202 (1995).

(213) V.M.Galkin, D.E.Pelinovsky, and Yu.A.Stepanyants, The Structure of the Rational Solutions to the Boussinesq equation, *Physica D* **80**, 246–255 (1995).

(214) K.A.Gorshkov and D.E.Pelinovsky, Asymptotic Theory of Plane Soliton Self-Focusing in Two-Dimensional Wave Media, *Physica D* **85**, 468–484 (1995).

(215) K.A.Gorshkov and D.E.Pelinovsky, On a Wave Field Transformation Described by the Two-Dimensional Kadomtsev–Petviashvili Equation, *Inverse Problems* **11**, 603–610 (1995).

(216) D.E.Pelinovsky, Yu.A.Stepanyants and Yu.S.Kivshar, Self-Focusing of Plane Dark Solitons in Nonlinear Defocusing Media, *Phys.Rev.E* **51**, 5016–5026 (1995).

(217) D.E.Pelinovsky and R.H.J.Grimshaw, A Spectral Transform for the Intermediate Nonlinear Shrödinger Equation, *J.Math.Phys.* **36**, 4203–4219 (1995).

(218) D.Pelinovsky, Rational Solutions of the Kadomtsev–Petviashvili Hierarchy and the Dynamics of Their Poles. 1. New form of a general rational solution, *J.Math.Phys.* **35**, 5820–5830 (1994).

(219) D.Pelinovsky, Instability and Decay of Solitary Waves in the Davey–Stewartson 1 System, *Phys.Lett.A* **196**, 181–186 (1994).

(220) D.E. Pelinovsky and Yu.A. Stepanyants, Self-Focusing Instability of Nonlinear Plane Waves in Shear Flows, *JETP* **78**, 883–891 (1994) [Version in Russian: *Zh.Eksp.Teor.Fiz.* **105**, 1635–1652 (1994)].

(221) D.E. Pelinovsky and Yu.A. Stepanyants, Solitary Wave Instability in the Positive-Dispersion Media Described by the Two-Dimensional Boussinesq Equations, *JETP* **79**, 105–112 (1994) [Version in Russian: *Zh.Eksp.Teor.Fiz.* **106**, 192–206 (1994)].

(222) G.D.Kuznetsova, D.E.Pelinovsky, and V.G.Yakhno, Mathematical Models of the Dynamics of the Spreading Depression Waves in Cerebrum Cortex, *Izvestiya VUZ: Applied Nonlinear Dynamics* **2**, NN. 3 & 4, 86–99 (1994) [in Russian].

(223) K.A. Gorshkov, D.E. Pelinovsky, and Yu.A. Stepanyants, Normal and Anomalous Scattering, Formation and Decay of Bound States of Two-Dimensional Solitons Described by the Kadomtsev–Petviashvili Equation, *JETF* **77**, 237–245 (1993) [Version in Russian: *Zh.Eksp.Teor.Fiz.* **104**, 2704–2720 (1993)].

(224) D.E. Pelinovsky and Yu.A. Stepanyants, Self-Focusing Instability of Plane Solitons and Chains of Two-Dimensional Solitons in Positive-Dispersion Media, *JETF* **77**, 602–608 (1993) [Version in Russian: *Zh.Eksp.Teor.Fiz.* **104**, 3387–3400 (1993)].

(225) D.E. Pelinovsky and Yu.A. Stepanyants, New Multisoliton Solutions of the Kadomtsev–Petviashvili Equation, *JETP Lett.* **57**, 24–28 (1993) [Version in Russian: *Pis'ma Zh.Eksp.Teor.Fiz.* **57**, 25–29 (1993)].

(226) D.E. Pelinovsky and V.G. Yakhno, Fronts of Multiple Transitions in Neural Network Media, *Neural Network World* **4**, 443–456 (1993).

(227) V.M.Galkin, D.E.Pelinovsky, and Yu.A.Stepanyants, On the Existence of Multisolitons Described by the KP1 equation, *Oscillations and Waves in Distributive Media*, Nizhny Novgorod Polytechnical Institute Press, 1992, 15–19 [in Russian].

Articles in Proceedings:

(1) D.E. Pelinovsky and A. Saalmann, Inverse scattering for the massive Thirring model, *Nonlinear Dispersive Partial Differential Equations and Inverse Scattering*, Editors: P. Miller, P. Perry, J.C. Saut, and C. Sulem, (Springer, New York, 2020), accepted.

(2) D.E. Pelinovsky, T. Penati, and S. Paleari, Existence and stability of Klein-Gordon breathers in the small-amplitude limit, *Proceedings of the Conference on Mathematics of Wave Phenomena 2018*, accepted (2020)

(3) D.E. Pelinovsky, Spectral stability of nonlinear waves in KdV-type evolution equations, in *Nonlinear Physical Systems: Spectral Analysis, Stability, and Bifurcations* (Edited by O.N. Kirillov and D.E. Pelinovsky) (Wiley-ISTE, NJ) 377–400 (2014)

(4) D. Pelinovsky and V. Rothos, Stability of discrete breathers in magnetic metamaterials, in *Localized excitations in nonlinear complex systems - current state of the art and future perspectives* (Edited by R. Carretero-Gonzalez, J. Cuevas-Maraver, D. Frantzeskakis, N. Karachalios, P. Kevrekidis, and F. Palmero-Acebedo) (Springer, NY) pp. 359–376 (2014)

(5) T. Mizumachi and D. Pelinovsky, On the asymptotic stability of localized modes in the discrete nonlinear Schrodinger equation, *DCDS S* **5**, 971–987 (2012)

(6) D. Pelinovsky, Survey on global existence in the nonlinear Dirac equations in one dimension, "*Harmonic Analysis and Nonlinear Partial Differential Equations*" (Editors T. Ozawa and M. Sugimoto) RIMS Kokyuroku Bessatsu, B **26**, 37–50 (2011)

(7) C. Chong and D.E. Pelinovsky, Variational approximations of bifurcations of asymmetric solitons in cubic-quintic nonlinear Schrödinger lattices, Discrete and Continuous Dynamical Systems Series S **4**, 1019–1031 (2011)

(8) M. Chugunova and D. Pelinovsky, On the uniform convergence of the Chebyshev interpolants for solitons, *Mathematics and Computers in Simulations* **80**, 794-803 (2009).

(9) H. Kalisch and D. Pelinovsky, Dispersion–managed solitons in limit of large energy, Proceedings of the Steklov Institute of Mathematics Supplement **1**, 98-107 (2003).

(10) A.S. Fokas, D.E. Pelinovsky, and C. Sulem, Interaction of Lumps With a Line Soliton for the DSII Equation, *Physica D* **152–153**, 189–198 (2001).

(11) D.E. Pelinovsky, A Mysterious Threshold for Transverse Instability of Deep–Water Solitons, *Mathematics and Computers in Simulations* **55**, 585–594 (2001).

(12) D.E. Pelinovsky and C. Sulem, Embedded Solitons of the DSII Equation, *CRM Proceedings and Lecture Notes* **27**, Edited by I.M. Sigal and C. Sulem, 135–145 (2001).

(13) D.E. Pelinovsky and C. Sulem, Asymptotic Approximations for a New Eigenvalue in Linear Problems Without a Threshold, *Theor. Mat. Phys.* **122**, 98–106 (2000).

(14) D.Pelinovsky, On a Structure of the Explicit Solutions to the Davey–Stewartson Equations, *Physica D* **87**, 115–122 (1995).