

CURRICULUM VITAE

PERSONAL INFORMATION

- Name
- E-mail
- Nationality
- Date of birth

PRESENT AFFILIATION

- Address
- Telephone
- Position

CO-AFFILIATION

- Address
- Position

ACADEMIC TITLE

DEGREES

- 2016
- 2002
- 2002

WORK EXPERIENCE

February 1999 – present

September 1999 – June 2001,
September 2012 – December 2018

August 2010 – July 2012

PROFESSIONAL ACTIVITY



ALEXEY SLUNYAEV / SLYUNYAEV

Slunyaev@appl.sci-nnov.ru, Slunyaev@gmail.com

Russian

28 JANUARY 1976

**INSTITUTE OF APPLIED PHYSICS OF THE RUSSIAN ACADEMY OF SCIENCES
DEPARTMENT OF NONLINEAR GEOPHYSICAL PROCESSES**

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HEAD OF GROUP FOR MODELING OF EXTREME WAVE PHENOMENA IN THE OCEAN

NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS

25/12, UL. BOLSHAYA PECHORSKAYA, NIZHNY NOVGOROD, 603950, RUSSIA
Expert

PROFESSOR OF THE RUSSIAN ACADEMY OF SCIENCES

Doctor of Sciences in Mathematics and Physics (- habilitation)
Institute of Applied Physics of RAS

Candidate of Sciences in Mathematics and Physics (- PhD)
Institute of Applied Physics of RAS

PhD in Mechanics
L'Universite de la Mediterranee (Mediterranean University, Marseille, France)

Institute of Applied Physics of the Russian Academy of Sciences
Junior researcher – Scientist – Senior Scientist

Nizhny Novgorod Technical State University (Russia)
Lecturer, Senior Scientist

Keele University, EPSAM (UK)
Marie Curie Fellow

Guest editor, special issue: Advances in the nonlinear wave research for hazard warning and mitigation. *Natural Hazards*, 2015-2016

Guest editor, special issue: Extreme seas and ship operations. *Natural Hazards and Earth System Sciences*, 2013-2014

Guest editor, special issue: Nonlinear waves in the ocean. *Nonlinear Processes in Geophysics*, 2011, vol. 18 and 2012, vol. 19.

Guest editor, special issue: Rogue waves. *Fundamental and Applied Hydrophysics*, 2011, vol. 4, No. 4 and vol. 5, No. 1

Co-convener of the session NH 5.2 "Extreme Waves". General Assembly of European Geophysical Union (since 2011)

Scientific Secretary of the Scientific Council of the Russian Academy of Sciences "Nonlinear Dynamics" (since 2006)

Scientific Secretary, Int. Sci. School "Nonlinear Waves" (2016, 2018, Nizhny Novgorod, Russia)

RESEARCH GRANTS

FP7-PEOPLE-2009-IIF Marie Curie Actions—International Incoming Fellowship: 2010-2013
 FP7-SST-2008-RTD-1, project “Extreme Seas”: 2009-2013, *PI of the Russian Team*
 Russian Scientific Foundation (since 2015)
 Russian Foundation for Basic Research: various projects (including international) since 1999
 Russian Federal Agency for Science and Innovations: participation in contracts 2005-2012
 Council of the President of the Russian Federation: collaborative and personal grants 2003-2011
 International Association INTAS: 1999-2008

AWARDS

Leonid Mandelshtam Prize of the Russian Academy of Sciences (2018)
 Medal of the Russian Academy of Sciences (2006)
 Personal grant of the Russian Science Support Foundation (2006-2007)
 Personal support from INTAS Young Scientist Fellowship (2004-2007)
 Prize Winner at the Competition of young researches of the Institute of Applied Physics (2004)
 a bursar of the scholarship for young scientists of the Russian Academy of Sci. (2000-2002)
 is selected and named as a Soros Graduate Student (2000)

H-INDICES

H-index Google Scholar (02-Aug-2018) = 23

H-index Web of Science (19-Feb-2018) = 20

PUBLICATION LIST**BOOK**

C. Kharif, E. Pelinovsky, A. Slunyaev, *Rogue Waves in the Ocean*, Springer-Verlag Berlin Heidelberg (2009)

SELECTED JOURNAL PAPERS

A. Slunyaev, A. Dosaev, On the incomplete recurrence of modulationally unstable deep-water surface gravity waves. *Comm. Nonlinear Sci. Num. Simulation* 66, 167–182 (2019).
 A.V. Slunyaev, Group-wave resonances in nonlinear dispersive media. *Phys. Rev. E* 97, 010202(R) (2018).
 A. Slunyaev, M. Klein, G. Clauss, Laboratory and numerical study of intense envelope solitons of water waves: generation, reflection from a wall and collisions. *Phys. Fluids* 29, 047103 (2017).
 A.V. Slunyaev, E.N. Pelinovsky, The role of multiple soliton interactions in generation of rogue waves: the mKdV framework. *Phys. Rev. Lett.* 117, 214501 (2016).
 A. Slunyaev, A. Sergeeva, E. Pelinovsky, Wave amplification in the framework of forced nonlinear Schrödinger equation: the rogue wave context. *Physica D* 303, 18–27 (2015).
 V.I. Shrira, A.V. Slunyaev, Nonlinear dynamics of trapped waves on jet currents and rogue waves. *Phys. Rev. E* 89, 041002(R) 1–5 (2014).
 A. Sergeeva, A. Slunyaev, E. Pelinovsky, T. Talipova, and D.-J. Doong, Numerical modeling of rogue waves in coastal waters. *Nat. Hazards Earth Syst. Sci.* 14, 861–870 (2014).
 V.I. Shrira, A.V. Slunyaev, Trapped waves on jet currents: asymptotic modal approach. *J. Fluid Mech.* 738, 65-104 (2014).
 A. Slunyaev, E. Pelinovsky, C. Guedes Soares, Reconstruction of extreme events through numerical simulations. *J. Offshore Mech. Arctic Engin.* 136, 011302 (2014).
 A.V. Slunyaev, V.I. Shrira, On the highest non-breaking wave in a group: fully nonlinear water wave breathers vs weakly nonlinear theory. *J. Fluid Mech.* 735, 203-248 (2013).
 A. Slunyaev, E. Pelinovsky, A. Sergeeva, A. Chabchoub, N. Hoffmann, M. Onorato, N. Akhmediev, Super rogue waves in simulations based on weakly nonlinear and fully nonlinear hydrodynamic equations. *Phys. Rev. E* 88, 012909-1–10 (2013).
 A. Sergeeva, A. Slunyaev, Rogue waves, rogue events and extreme wave kinematics in spatio-temporal fields of simulated sea states. *Nat. Hazards Earth Syst. Sci.* 13, 1759-1771 (2013).
 A. Slunyaev, G.F. Clauss, M. Klein, M. Onorato, Simulations and experiments of short intense envelope solitons of surface water waves. *Phys. Fluids* 25, 067105,1-17 (2013).
 A. Slunyaev, I. Didenkulova, E. Pelinovsky, Rogue Waters. *Contemp. Phys.* 52, 571-590 (2011).
 A.V. Slunyaev, A.V. Sergeeva, Stochastic simulation of unidirectional intense waves in deep water applied to rogue waves. *JETP Letters*, 94, 779–786 (2011)
 A. Slunyaev, Freak wave events and the wave phase coherence. *Eur. Phys. J. Special Topics* 185, 67-80 (2010).

CONFERENCES

participating in more than 110 Conferences, including more than 10 invited presentations, incl.:
 Int. Conf. “Days on Diffraction 2018” (St. Petersburg, 2018)
 Scientific School “Nonlinear waves” (N. Novgorod, 2012, 2018)
 Int. Conf. “Surface waves in the Ocean” (Bergen, 2017)
 Int. W. and E. Heraeus Seminar “Extreme Events and Rogue Waves” (Bad Honnef, 2016)
 Symp. “Fluctuation-driven phenomena and large deviations” (Warwick, 2016)
 Int. Conf. “Wave Interactions” (Linz, 2012, 2014, 2016)