# Curriculum Vitae

Alexander I. NAZAROV

### Office address:

Lab. of Mathematical Physics, St.-Petersburg Branch of Steklov Math. Institute, Fontanka, 27, Saint-Petersburg, 191023, RUSSIA e-mail: *al.il.nazarov@gmail.com* 

### Personal:

Date and place of birth: April 27, 1963, Leningrad, USSR Citizenship: Russian

#### **Degrees:**

- Sc.D., Mathematics, St.-Petersburg Branch of Steklov Math. Institute, December 2004 Thesis title: "The Venttsel' problem and its generalizations"
- Ph.D., Mathematics, Leningrad State University, May 1988 Thesis directed by Prof. Nina N. Uraltseva Thesis title: "Maximum and Hölder estimates for the solutions of parabolic equations"
- M.S., Mathematics, Leningrad State University, June 1985 Thesis directed by Prof. Nina N. Uraltseva Thesis title: "An estimate for the maximum of the solution of parabolic equation"

### Main Research Interests:

Boundary value problems for nonlinear elliptic and parabolic nondivergence equations, symmetry and asymmetry of the solutions of extremal problems, applications of BVPs and spectral theory in random processes theory and in mathematical statistics, non-local operators

### Academic positions:

• Sept. 2012 –	Leading Researcher,
	StPetersburg Branch of Steklov Math. Institute
• Sept. 2012 –	Full Professor (part time),
	StPetersburg State University
• Nov. 2005 – Aug. 2012	<u>Full</u> Professor,
	StPetersburg State University
• Nov. 1991 – Nov. 2005	<u>Assoc. Professor,</u>
	StPetersburg State University
• Sept. 1988 – Nov. 1991	<u>Assistant Professor</u> ,
	Leningrad State University
• Sept. 1986 – May 1988	Assistant Professor (part time),
	Leningrad State University

### Short visiting positions:

- Feb. 2007 Universität des Saarlandes, Saarbrücken, Germany
- May 2008 Linköping university, Linköping, Sweden
- Nov. 2008 Politecnico di Bari, Bari, Italy
- Feb. 2009 Politecnico di Bari, Bari, Italy
- July 2009 Universität des Saarlandes, Saarbrücken, Germany
- Nov. 2009 Linköping university, Linköping, Sweden
- Fall 2010 Chelyabinsk State University, Chelyabinsk, Russia
- Feb. 2011 Linköping university, Linköping, Sweden
- Feb. 2012 Linköping university, Linköping, Sweden
- Feb. 2012 Free University, Berlin, Germany
- March 2013 Linköping university, Linköping, Sweden
- June 2013 Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Italy
- Oct. 2013 Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Italy
- Feb. 2014 Linköping university, Linköping, Sweden
- April 2014 University of Minnesota, Minneapolis, USA
- Nov. 2014 Texas Tech University, Lubbock, USA
- Feb. 2015 Linköping university, Linköping, Sweden
- Oct. 2015 Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Italy
- Oct. 2015 Università Federico II, Napoli, Italy
- Dec. 2015 Universität des Saarlandes, Saarbrücken, Germany
- Jan. 2016 Università Federico II, Napoli, Italy
- Jan. 2016 Università Sapienza, Roma, Italy
- Feb. 2016 Linköping university, Linköping, Sweden
- Oct. 2016 Politecnico di Bari, Bari, Italy
- Jan. 2017 Institut Mittag-Leffler, Stockholm, Sweden
- Jan. 2017 Linköping university, Linköping, Sweden
- Feb. 2017 Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Italy
- Feb. 2017 Università Sapienza, Roma, Italy
- Nov. 2017 Universität des Saarlandes, Saarbrücken, Germany
- Jan. 2018 Linköping university, Linköping, Sweden
- Feb. 2018 Politecnico di Bari, Bari, Italy
- May 2018 Università Sapienza, Roma, Italy
- Sept. 2018 Kazakh-British Technical University, Almaty, Kazakhstan
- Oct. 2018 Università di Udine, Udine, Italy
- Nov. 2018 Universität des Saarlandes, Saarbrücken, Germany
- Sept. 2019 Università Sapienza, Roma, Italy
- Sept. 2019 Satbaev University, Almaty, Kazakhstan

• Nov. 2019 – Universität des Saarlandes, Saarbrücken, Germany

# Invited Lectures Given (from 2014):

- Texas Tech University, Lubbock, USA, 2014
- American Math Society Sectional Meeting, Lubbock, USA, 2014

 $\bullet$  Int. Conference "Spectral Theory and Differential Equations" dedicated to the centennary of B.M. Levitan, Moscow, 2014

- Int. Conference on Differential Equations and Dynamical Systems, Suzdal', Russia, 2014
- Int. Conference "Spectral Theory and Mathematical Physics", Santiago, Chile, 2014
- Int. Conference "PPF" in honour of Lars Inge Hedberg, Linköping, Sweden, 2015
- Int. Conference on Control Theory and Mechanics, Suzdal', Russia, 2015
- Int. Conference "Spectral Theory and Applications" in memory of Boris Pavlov, Stockholm, Sweden, 2016
- 27th Nordic Congress of Mathematicians, Stockholm, Sweden, 2016
- Int. Conference "Analysis, Probability and Geometry", Moscow, Russia, 2016
- Int. Conference "Mathematics and Literature", Óbidos, Portugal, 2016
- Int. Conference on Probability Theory and Random Processes, St.-Petersburg, 2017

• Int. Conference on Spectral Theory of Partial Differential Operators in memory of M. Solomyak and M. Birman, Stockholm, Sweden, 2017

• The Ninth Int. Conference on Spectral Theory dedicated to the memory of M.Sh. Birman, St.-Petersburg, 2017

- Int. Conference on Control Theory and Mechanics, Suzdal', Russia, 2017
- Beijing International Symposium on Probability Theory, Beijing, China, 2017

 $\bullet$  The second Chinese-Russian seminar on asymptotic methods in probability theory and mathematical statistics, Changchun, China, 2017

• Int. Conference "Dynamical Systems and Perturbations" celebrating S.Yu. Pilyugin's 70th birthday, St.-Petersburg, 2017

- Int. Conference "Science and Revolution", St.-Petersburg, 2017
- Int. Conference "Sobolev spaces and PDEs" in honour of Vladimir Maz'ya, Roma, Italy, 2018
- Int. Conference on Differential Equations and Dynamical Systems, Suzdal', Russia, 2018

• Int. School-Conference "Sobolev Readings" dedicated to 110th anniversary of S.L. Sobolev, Novosibirsk, Russia, 2018

• Int. Conference "Modern methods, problems and applications of Operator Theory and Harmonic Analysis IX", Rostov-on-Don, Russia, 2019

• Int. Conference "Stochastic Models II", St.-Petersburg, 2019

 $\bullet$  Int. Conference "Singular Problems, Blow-up and Regimes with Peaking in Nonlinear PDEs", Moscow, 2019

- Int. Conference "Shilnikov Workshop", Nizhniy Novgorod, Russia, 2019
- Int. Conference "Spectral Theory and Mathematical Physics", Sochi, Russia, 2020

Int. Conference on Differential Equations and Dynamical Systems, Suzdal' (online), Russia, 2020

- Int. School "Mathematical Methods of Mechanics", Moscow (online), 2020
- Int. Conference "OTHA Spring 2021", Rostov-on-Don, Russia, 2021
- Int. Workshop "Diffusion in Inhomogeneous and Irregular Environments", Roma (online), Italy, 2021

• The Twelfth Int. Conference on Spectral Theory dedicated to the memory of M.Sh. Birman, St.-Petersburg, 2021

- Int. Conference "OTHA 2021", Rostov-on-Don, Russia, 2021
- Int. Conference "New Trends in Mathematical Stochastics", St.-Petersburg, 2021
- 15th International Conference on Free Boundary Problems: Theory and Applications, Berlin (online), 2021
- XVI Vladikavkaz Youth Mathematical School, Vladikavkaz (online), 2021
- Int. School "Mathematical Methods of Mechanics", Moscow (online), 2021
- Master-class on Geometrical Analysis, Novosibirsk, 2021

• Int. Conference " Differential Equations and Related Topics", dedic. to the memory of I.G. Petrovskii, Moscow, 2021

- Int. Conference on Differential Equations and Dynamical Systems, Suzdal', 2022
- International Congress of Mathematicians 2022, online
- Int. School "Mathematical Methods of Mechanics", Moscow, 2022
- The Second conference of Mathematical Centers in Russia, Moscow, 2022
- Workshop "OTHA FALL 2022", Sochi, 2022
- Traditional conference of Moscow and St. Petersburg Steklov Institutes, St. Petersburg, 2023
- International Conference on the Theory of Functions of Several Real Variables, dedicated to the 90th anniversary of O.V. Besov, Moscow, 2023

• PDE in Seoul 2023: Conference in honor of Professor Mikhail Safonov's 70th birthday, Seoul (mixed), 2023

# PhD advisor:

- 2008 A. Scheglova, St.-Petersburg State University
- 2011 S. Kolonitskii, St.-Petersburg State University
- 2011 R. Pusev, St.-Petersburg Branch of Steklov Math. Institute
- 2018 S. Bankevich, St.-Petersburg State University
- 2018 N. Rastegaev, St.-Petersburg State University
- 2018 Yu. Petrova, St.-Petersburg Branch of Steklov Math. Institute
- 2021 N. Ustinov, Vladimir State University

### MS advisor:

- 2003 A. Scheglova, St.-Petersburg State University
- 2005 A. Petrova, St.-Petersburg State University
- 2006 S. Kolonitskii, St.-Petersburg State University

- 2008 S. Bankevich, St.-Petersburg State University
  - I. Gerasimov, St.-Petersburg State University
  - A. Vdovina, St.-Petersburg State University
- 2013 A. Enin, St.-Petersburg State University
  - A. Paletskikh, St.-Petersburg State University
  - Yu. Petrova, St.-Petersburg State University
  - N. Rastegaev, St.-Petersburg State University
- 2014 A. Slastenin, St.-Petersburg State University
- 2015 B. Neterebskii, St.-Petersburg State University – N. Ustinov, St.-Petersburg State University
- 2017 E. Galkovskii, St.-Petersburg State University
- 2019 V. Mogunova, St.-Petersburg State University
- 2023 K. Medvedev, St.-Petersburg State University

### Conferences and Workshops organized:

• International Conference "Advances in Nonlinear PDEs" in honor of the outstanding mathematician Nina N. Uraltseva and on the occasion of her 80th anniversary, Saint-Petersburg, PDMI RAS, 2014 (the head of Organizing Committee)

• International Conference on PDEs (Silkroad Mathematics Center Series International Conferences), Beijing, China, 2017 (a member of Program Committee)

• International Conference "PDEs and Mathematical Hydrodynamics" in Honor of V.A. Solonnikov's 85'th Birthday, Saint-Petersburg, PDMI RAS, 2018 (a member of Organizing Committee)

• Conference "Differential Equations, Mathematical Modeling and Numerical Algorithms", Belgorod, 2021 (a member of Program Committee)

• International Conference "O.A. Ladyzhenskaya centennial conference on PDE's", Saint-Petersburg, PDMI RAS, 2022 (a member of Program Committee, the head of Organizing Committee)

• Traditional conference of Moscow and St. Petersburg Steklov Institutes, St. Petersburg, 2023 (a member of Program Committee and Organizing Committee)

• International Meeting "Trends in Partial Differential Equations" dedicated to the 90th birthday of outstanding mathematician Vsevolod A. Solonnikov, online (a member of Organizing Committee)

# Grants and Awards:

- Individual AMS Grant, 1992-1994
- Russian Scientific Foundation Grant (head of the project) Grant for small scientific groups, project 22-21-00027, 2022–2023
- Russian Scientific Foundation Grant (participant of the project) Project 17-11-01003, 2017–2019
- Russian Foundation for Basic Research Grants (head of the project) Grant 20-51-12004 NNIOa, 2020–2022 (joint grant RFBR–DFG)
- Russian Foundation for Basic Research Grants (participant of the project)

23 research projects,  $1993{-}2022$ 

- Grants for support of Leading Scientific Schools (participant of the project) 7 projects, 1997–2015
- Program "Russian Universities" Grants (participant of the project) 5 projects, 1998–2005
- Federal Grants "Integration of Science and High School" (participant of the project) 2 projects, 1999–2004
- Russian Ministry of Education Grant (head of the project) Grant No. E00-1-124, 2001–2002
- Russian Ministry of Education Scientific Program (participant of the project) Project 4733, 2005
- Federal Scientific and Innovation Program (participant of the project) Project 2010-1.1-111-128-033, 2010–2012
- St.Petersburg State University Grant (head of the project) Grant 6.38.64.2012, 2012–2014
- St.Petersburg State University Grants (participant of the project) Grant 6.38.670.2013, 2013–2015 Grant 6.65.37.2017, 2017–2019 (joint grant SPSU–DFG)
- ISSEP Awards Docent-2002 Docent-2004
- Honorary Sertificate from Russian Ministry of Education, 2006
- Honorary Worker of Higher Education, 2013
- St. Petersburg State University Prize for scientific achievements, 2019
- Invited Speaker of ICM2022

#### **Publications:**

200 +titles

### Membership of Professional organizations:

St.-Petersburg Mathematical Society
 Vice-President 2023 –

 a member of the Council: 2005 – 2023
 a member of Revision Committee: 2001 – 2004
 a member of Society from 1992

### Other activities:

- A member of the State Expert Board in Mathematics and Mechanics: 2015 2022
- A member of the State Methodical Council in Mathematics and Mechanics: 2016 present
- A member of the Expert Board of Russian Foundation for Basic Research: 2018 2019
- A member of the Editorial Board in:

St.-Petersburg Mathematical Journal Functional Analysis and Applications (Moscow), Complex Variables and Elliptic Equations, Lithuanian Mathematical Journal, Mathematics in Higher Education (Moscow)

• Referee for:

Archive for Rational Mechanics and Analysis, Journal of Functional Analysis, Journal de Mathématiques pures et appliquées of Liouville, Transactions of American Mathematical Society, Journal of Mathematical Analysis and Applications, Bulletin des Sciences Mathématiques, Journal of Spectral Theory, Journal of Mathematical Fluid Mechanics, Zeitschrift für Analysis und ihre Anwendungen, Boundary Value Problems, Journal of Theoretical Probability, Statistics & Probability Letters, Mathematische Nachrichten, St.-Petersburg Mathematical Journal, Izvestiya: Mathematics, St.-Petersburg University Vestnik