



**Lina
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Oct 1 1981



Rus
b.

Professional mathematician with extensive experience in advanced mathematical research and problem-solving. Solid foundation in linear algebra and basic Python for mathematical computations, with the analytical skills and adaptability to quickly learn and apply new concepts. Currently completing courses in artificial intelligence and machine learning to expand expertise into data-driven research domains.

Skills (keywords)

- Mathematical research (PDEs, boundary value problems, Sobolev spaces)
- Academic publishing (Latex)
- Grant writing & project management
- Research group leadership
- University teaching & PhD supervision
- Peer review (multiple journals)
- Computational modeling (Python)
- International research collaboration (China, Turkey, Uzbekistan)
- Conference presentations

Skills (full format)

- **Mathematical Research** – Extensive expertise in partial differential equations, quasielliptic and pseudohyperbolic systems, boundary value problems, and Sobolev spaces.
- **Academic Publishing** – Author of 20+ peer-reviewed publications; experienced in preparing manuscripts, conference papers, and grant reports to international standards. Latex tool.
- **Project & Grant Management** – Secured and managed over 10 research grants from national and international funding bodies; budget allocation and reporting.
- **Leadership & Team Coordination** – Led research groups of up to 12 members (including Doctors of Science, PhDs, and PhD students); ensured timely delivery of publications and reports.
- **Teaching & Mentoring** – 20 years of teaching university-level mathematics; supervised MSc and PhD students to successful thesis completion.
- **Peer Review** – Reviewer for multiple scientific journals including Siberian Mathematical Journal, J. Appl. Ind. Math., and Siberian Adv. Math.
- **Computational Tools** – Skilled in algorithm design and implementation using Python mathematical modeling and simulations.
- **International Collaboration** – Experience working with research institutions abroad (e.g., China, Turkey, Uzbekistan) on joint projects and publications.
- **Presentation & Communication** – Delivered talks at national and international conferences; fluent in preparing clear scientific presentations.

Education and Degree

09.1999-06.2005

Department of Mathematics and Mechanics, Novosibirsk State University (Novosibirsk).

07.2005

Diploma (M. Sc.), Novosibirsk State University (Novosibirsk).

09.2005-06.2008

Postgraduate, Novosibirsk State University (Novosibirsk).

06.2008

Candidate of Physical and Mathematical Sciences (Ph. D.), Sobolev Institute of Mathematics of the Siberian Branch of the Russian Academy of Sciences (Novosibirsk).

Ph. D. Thesis: "Boundary Value Problems for Quasielliptic Systems".

Ph. D. Advisor: Professor [Gennadii V. Demidenko](#).

Experience in scientific institutes

01.2009-01.2012

Scientific Researcher, Sobolev Institute of Mathematics of the Siberian Branch of the Russian Academy of Sciences (Novosibirsk).

- Led research projects in **Partial Differential Equations**, resulting in **5** peer-reviewed publications and **3** conference presentations.
- Secured **5 grants** in competitive research funding.
- Served as peer reviewer for **Siberian Mathematical Journal (and others)**, evaluating manuscripts for mathematical accuracy and originality.
- Designed and implemented computational algorithms (MATLAB)

01.2019-12.2020

Group Leader, Mathematical Center in Akademgorodok

Group size: 3 Doctors of Science, 4 PhDs, 5 PhD students

- Oversaw and ensured timely submission of publications and reports by group members.
- Prepared comprehensive group reports in accordance with institutional requirements.
- Managed and allocated financial compensation within the group.

01.2012-01.2024

Senior Scientific Researcher, Sobolev Institute of Mathematics of the Siberian Branch of the Russian Academy of Sciences (Novosibirsk).

- Led research projects in **Partial Differential Equations**, resulting in **5** peer-reviewed publications and **3** conference presentations.
- Secured **6 grants** in competitive research funding.
- Supervised **4** MSc/PhD students (China), several of whom continued to academic or industry positions.
- Collaborated with **1** international research institutions on joint publications (China).
- Served as peer reviewer for **Siberian Mathematical Journal, J. Appl. Ind. Math, Siberian Adv. Math. (and others)**, evaluating manuscripts for mathematical accuracy and originality.
- Designed and implemented computational algorithms (**Python**)

Teaching and mentoring experience

09.2004-05.2020

Assistant, Novosibirsk State University (Novosibirsk). (“Ordinary Differential Equations”, “Equations of Mathematical Physics”, “Introduction to the Theory of Sobolev Spaces”, “Partial Differential Equations, II”)

05.2020-09.2023

Senior Lecturer, Novosibirsk State University (Novosibirsk). (“Ordinary Differential Equations”, “Equations of Mathematical Physics”, “Introduction to the Theory of Sobolev Spaces”, “Partial Differential Equations, II”)

09.2023-08.2025

Associate Professor, Novosibirsk State University (Novosibirsk). (“Ordinary Differential Equations”, “Equations of Mathematical Physics”, “Partial Differential Equations, II”)

09.2020-07.2024

Scientific supervisor for 4 students of the Department of Mathematics and Mechanics, Novosibirsk State University (Novosibirsk)

Participation in scientific projects, grants and awards

2006-2008

Interdisciplinary integration project no. 35 "Treelike Catalogue of Mathematical Internet Resources", supported by the Siberian Branch of the Russian Academy of Sciences.

2006-2008

Complex integration project no. 2.2 "Deformation and Failure of Composite Materials and Structures", supported by the Siberian Branch of the Russian Academy of Sciences

2009

First Prize of the Administration of Novosibirsk Region for Scientific Achievements of Young Scientists in the Field of Fundamental and Applied Research, Nomination "Physical and Mathematical Sciences"

2009-2011

Interdisciplinary integration project no. 107 "Methods of Research of Differential-Difference Equations and Applications to Problems of Biology and Chemistry", supported by the Siberian Branch of the Russian Academy of Sciences

2009-2011

Project "Fundamental Problems of Contemporary Mathematics", supported by the Ministry of Education and Science of the Russian Federation, Federal Target Program "Scientific and Educational Personnel of Innovative Russia" for 2009-2013, government contract no. 02.740.11.0429

2010-2011

Project “Research of Solvability of Boundary Value Problems for Quasielliptic Systems”, supported by the Siberian Branch of the Russian Academy of Sciences within the framework of M.A.Lavrentiev contest of projects of young scientists (head)

2010-2012

Project "Direct and Inverse Problems for Differential Equations", supported by the Ministry of Education and Science of the Russian Federation, Federal Target Program "Scientific and Educational Personnel of Innovative Russia" for 2009-2013, government contract no. 16.740.11.0127

2012-2013

Project "Boundary Value Problems for Elliptic Equations and Sobolev Type Equations", supported by the [Russian Foundation for Basic Research](#) (RFBR), no. 12-01-31030 (head)

2012-2014

Interdisciplinary integration project no. 80 "Differential-Difference and Integro-Differential Equations. Applications to Problems of the Natural Sciences", supported by the Siberian Branch of the Russian Academy of Sciences

2019-2020

Mathematical Center in Akademgorodok (no. 075-15-2019-1613) with the Ministry of Science and Higher Education of the Russian Federation.

2022

"Theory of differential equations and applications" (FWNF2022-0008)

2022-2023

Mathematical Center in Akademgorodok (no. 075-15-2022-282) with the Ministry of Science and Higher Education of the Russian Federation.

2024-2025

Project "Boundary value problems for pseudohyperbolic equations", supported by the Russian Scientific Foundation (no. 24-21-00370).

Publications

1. Bondar, L.N., Ma, X. On a Boundary Value Problem in a Cylinder for a Sixth-Order Pseudohyperbolic Equation. *Sib. Adv. Math.* V. 34, pp. 280–293 (2024).
<https://doi.org/10.1134/S1055134424040047>
2. Bondar L. N. and Mingnarov S. B. Necessary Conditions for Existence of Solutions of a Certain Pseudohyperbolic System of Equations // *Siberian Advances in Mathematics*. V. 34, No. 3, pp. 175—183 (2024). <https://link.springer.com/article/10.1134/S1055134424030027>
3. Bondar L.N., Mingnarov S.B. Conditions for Solvability of the Cauchy Problem for One Pseudohyperbolic System. *Comput. Math. and Math. Phys.* V. 64, pp. 1775–1784 (2024).
<https://doi.org/10.1134/S096554252470091X>
4. Bondar L.N., Mingnarov S.B. On the Cauchy problem for one system of pseudohyperbolic type. *Mathematical notes of NEFU*, V. 30, No. 4, pp. 3–11 (2023)
<https://www.mathnet.ru/links/2e246f948fba771d42430cfc0c5b680e/svf396.pdf>
5. Bondar L.N., Demidenko G.V. On well-posedness of the Cauchy problem for pseudohyperbolic equations in weighted Sobolev spaces. *Siberian Mathematical Journal*. V. 64, No. 5, pp. 1076–1090 (2023). <https://doi.org/10.1134/S0037446623050026>
6. L. N. Bondar', G. V. Demidenko, V. S. Nurmakhatov. Boundary value problem in a cylinder for a pseudohyperbolic equation. *Chelyab. Fiz.-Mat. Zh.*, V. 8, No. 4, pp. 469–482 (2023).
<https://cpmj.csu.ru/index.php/cpmj/article/view/12816/391>
7. Bondar L.N., Demidenko G.V. On the Cauchy Problem for Pseudohyperbolic Equations with Lower Order Terms. *Mathematics*. V.11. N18. 3943 :1-16 (2023).
<https://www.mdpi.com/2227-7390/11/18/3943>

8. Bondar L.N., Shemetova V.V. On Boundary Value Problems in a Quarter-Plane for a Pseudohyperbolic Equation. *Sib. Adv. Math.* V. 33, pp. 87–106 (2023).
<https://doi.org/10.1134/S1055134423020013>
9. Bondar L.N., Demidenko G.V. Boundary value problems for one pseudohyperbolic equation in a quarter-plane. *Siberian Advances in Mathematics.* V.32. No. 1, pp. 13–28 (2022).
<https://doi.org/10.1134/S1055134422010023>
10. Bondar L.N., Nurmakhmatov V. On solvability of the boundary value problem for one pseudohyperbolic equation. *Siberian Electronic Mathematical Reports.* V.18, No. 2, pp. 1046–1057 (2021). <http://semr.math.nsc.ru/v18/n2/p1046-1057.pdf>
11. Bondar L.N., Demidenko G.V. On solvability of one class of quasielliptic systems. *Siberian Mathematical Journal.* V.61, No 6, pp. 963–982 (2020).
<https://link.springer.com/article/10.1134/S0037446620060026>
12. Bondar L.N., Demidenko G.V., Pintus G.M. Cauchy Problem for One Pseudohyperbolic System. *Comput. Math. and Math. Phys.* V.60, pp. 615–627 (2020).
<https://doi.org/10.1134/S0965542520040053>
13. Bondar L.N. On Necessary Conditions for the Solvability of One Class of Elliptic Systems in a Half-Space. *J. Appl. Ind. Math.* V.13, pp. 390–404 (2019).
<https://doi.org/10.1134/S1990478919030025>
14. Bondar L. N. Necessary conditions for the solvability of one class of boundary value problems for quasielliptic systems. *Siberian Adv. Math.* V. 29, No. 1, 22–31 (2019).
15. Bondar L. N. Asymptotic properties of a solution to the Cauchy problem for one Sobolev type system. *Sib. Èlektron. Mat. Izv.* V.15, pp. 894–905 (2018).
16. Bondar L. N. Solvability conditions for the second boundary value problem for the Navier system. *J. Appl. Industr. Math.* V. 12, No. 4, pp. 595–606, (2018).
17. Bondar L.N., Demidenko G.V. Asymptotic behavior at infinity of solutions to the nonhomogeneous Sobolev equation. *Siberian Math. J.* V. 59, No. 5, pp. 786–798 (2018)
18. Bondar L. N. On the solvability of the second boundary value problem for the Stokes system. *J. Appl. Industr. Math.* V. 8, No. 4, pp. 479–492 (2014)
19. Bondar L. N. Solvability of the second boundary value problem for one elliptic equation in a half-space. *J. Appl. Industr. Math.* V. 7, No. 4, pp. 460–471 (2013)
20. Bondar L. N. On solvability of one elliptic equation in a half-space. *Sib. Èlektron. Mat. Izv.* V. 9 618–638 (2012)
21. Bondar L. N. Solvability of Boundary Value Problems for Quasielliptic Systems in Weighted Sobolev Spaces. *J. Math. Sci.*, V. 186, No. 3, pp. 364–378 (2012).
22. Bondar L.N., Demidenko G.V. Boundary value problems for quasielliptic systems. *Siberian Math. J.* V. 49, No. 2, 202–217 (2008)

23. Bondar L.N. The behavior at infinity of a solution to a Sobolev type system. *Siberian Math. J.* V. 48, No. 5, pp. 784–797 (2007).
24. Bondar L.N. Solvability conditions of boundary value problems for quasielliptic systems. *Vestn. Novosib. Gos. Univ., Ser. Mat. Mekh. Inform.* V. 7, No. 4, pp. 9–26 (2007).