Vitalii O. Soldatov

Curriculum Vitae

October 2021

Personal: Born: September 27, 1990.

Citizen: Ukraine. Gender: male.

Work: Laboratory of Partial Differential Equations,

Department of Nonlinear Analysis,

Institute of Mathematics,

National Academy of Sciences of Ukraine, Tereshchenkivs'ka St., 3, 01004, Kyiv, Ukraine.

Phone: +38 (068) 235-2867

Email: soldatov@imath.kiev.ua, soldatovvo@ukr.net

ORCID: 0000-0001-7496-5524 Scopus Author ID: 56970918300

Web of Science ResearcherID: AAB-3048-2020

Mathscinet mrauthid: 1144666 Google Scholar ID: iLWoqOYAAAAJ

Education

2017 Ph.D. (Math.) Institute of Mathematics, NAS of Ukraine

Thesis: Continuity in a parameter of solutions to one-dimensional boundary-value problems

in Hölder spaces *Supervisor:* A. A. Murach

2013 Masters degree (Math.) Chernighiv National Pedagogical University

named after T. G. Shevchenko.

Employment

Since November 2016 Junior researcher Institute of Mathematics, NAS of Ukraine. Since March 2020 Researcher Institute of Mathematics, NAS of Ukraine.

Awards and Grants

- Participating in Grant of National Academy of Sciences of Ukraine for young scientists 0121U111949 "Analysis of boundary-value problems in models of natural sciences", 2021–2022.
- Prize of the President of Ukraine for young scientists, 2019.
- Scholarship of National Academy of Sciences of Ukraine for young scientists, since 2018–2020.
- Participated in Grant of National Academy of Sciences of Ukraine for young scientists 0117U003482 "New Methods of Analysis of one-dimensional boundary-value problems", 2017–2018.

Activities

• Member of the Organizing Committee of International Conference of Young Mathematicians, Kyiv, Ukraine. 2017–2019.

Research interests

Theory of Ordinary Differential Equations, Operator Theory, Differential Operators, Functional Analysis.

Publications

24 works including 12 journal papers and 12 conference presentations.

Journal Articles

- Approximation properties of solutions to multipoint boundary-value problems. *Ukrainskyi Matematychnyi Zhurnal*, 2021, Vol. 73, No. 3, 341–53. *arXiv*:2012.15604 (A. A. Murach, O. B. Pelekhata, V. O. Soldatov)
- Approximation properties of multipoint boundary-value problems. *Methods of Functional Analysis and Topology*, 2020, Vol. 26, No. 2, 119–125. *arXiv:2005.01806* (H. Masliuk, O. Pelekhata, V. Soldatov) *Full text pdf*

- One-dimensional parameter-dependent boundary-value problems in Holder spaces. Methods of Functional Analysis and Topology, 2018, Vol. 24, No. 2, 143–151. arXiv:1802.02019 (H. Masliuk, V. Soldatov) Full text pdf
- Approximation properties of multipoint boundary-value problems that are total with respect to the spaces $C^{(n)}$.(in Ukrainian) *Transactions of Institute of Mathematics of NAS of Ukraine*, 2017, Vol. 14, No. 3, Kyiv: Institute of Mathematics, NAS of Ukraine, 253–264. (H. O. Masliuk, V. O. Soldatov) *Full text pdf*
- Criterion of continuity with respect to parameter of solutions of multipoint boundary-value problems. (in Ukrainian) *Transactions of Institute of Mathematics of NAS of Ukraine*, 2017, Vol. 14, No. 3, Kyiv: Institute of Mathematics, NAS of Ukraine, 319–331. (V. O. Soldatov) *Full text pdf*
- A criterion for continuity in a parameter of solutions to generic boundary-value problems for higher-order differential systems. *Methods of Functional Analysis and Topology*, 2016, Vol. 22, No. 4, 375–386. *arXiv:1610.07996* (V. A. Mikhailets, A. A. Murach, V. Soldatov)
- Continuity in a parameter of solutions to linear boundary-value problems in HolderZygmund spaces. (in Ukrainian) *Reports of NAS of Ukraine*, 2016, no. 10, 15–21. doi:10.15407/dopovidi2016.10.015. (A. A. Murach, V. Soldatov) *Full text pdf*
- Continuity in a parameter of solutions to generic boundary-value problems. *Electronic Journal of Qualitative Theory of Differential Equations*, 2016, No. 87, 1–16. *arXiv:1604.07029*. (V. A. Mikhailets, A. A. Murach, V. Soldatov)
- Multipoint boundary-value problems for systems of first order differential equations in Holder spaces. (in Ukrainian) *Transactions of Institute of Mathematics of NAS of Ukraine*, 2016, Vol. 13, No. 2, Kyiv: Institute of Mathematics, NAS of Ukraine, 267–280.(V. O. Soldatov) *Full text pdf*
- Criterion of continuity with respect to parameter of solutions of boundary-value problems for systems of higher-order differential equations. (in Ukrainian) *Transactions of Institute of Mathematics of NAS of Ukraine*, 2016, Vol. 13, No. 1, Kyiv: Institute of Mathematics, NAS of Ukraine, 256–273.(A. A. Murach, V. O. Soldatov) *Full text pdf*
- Multipoint boundary-value problems for systems of differential equations of higher order. (in Ukrainian) *Transactions of Institute of Mathematics of NAS of Ukraine*, 2015, Vol. 12, No. 2, Kyiv: Institute of Mathematics, NAS of Ukraine, 327–337.(V. O. Soldatov) *Full text pdf*
- On the continuity in a parameter for the solutions of boundary-value problems total with respect to the spaces $C^{(n+r)}[a,b]$. *Ukrainian Mathematical Journal*, Vol. 67 (2015), No. 5, 785 794. doi:10.1007/s11253-015-1114-0. (V. O. Soldatov)

Conference Presentations

- On passage to the limit in boundary value problems for systems of differential equations of order r in spaces $C^{(n+r)}[a,b]$,
 - International Scientific Conference of Students and Young Scientists "Shevchenkivska vesna 2015", Kyiv, Ukraine, April 1–3, 2015.
- On the limit theorem for boundary-value problems for systems of differential equations of order $r \ge 1$ in the spaces $C^{(n+r)}[a,b]$,
 - International Conference of Young Mathematicians, Kyiv, Ukraine, June 3–6, 2015.
- Limit theorem for boundary-value problems in Hölder spaces (In Ukrainian), National Conference: Modern problems of probability theory and mathematical analysis, Vorohta, Ukraine, February 24–27, 2016.
- On passage to the limit in boundary value problems for systems of differential equations of order r in spaces $C^{(n+r)}[a,b]$,
 - V International Scientific Conference of Students and Young Scientists "Shevchenkivska vesna 2016", Kyiv, Ukraine, April 6–8, 2016.

- On the parameter continuity solutions boundary problems in Holder–Zygmund spaces, International scientific conference devoted to the 70th anniversary of Ukraine academician M. A. Perestyuk: Differential equations and their applications, Uzhgorod, Ukraine, May 19–21, 2016.
- On parameter depended generic boundary-valued problems, Seventeenth International scientific Mykhailo Kravchuk conference, May 19–20, 2016, Kyiv, Ukraine.
- About generic boundary-value problems depending on parameter International Conference on dyferentsialynh equations devoted to the 110th anniversary Ya. B. Lopatinskii, September 20–24 2016, Lviv, Ukraine.
- About continuity in a parameter of solutions to generic one-dimensional boundary-value problems. Book of abstracts. 5th International Conference for Young Scientists on Differential Equations and Applications dedicated to Yaroslav Lopatynsky, 9-11 November, 2016, Kyiv, Ukraine.
- About continuity in parameter of solutions to one-dimensional boundary problems in Holder spaces. International Conference of Young Mathematicians dedicated to the 100th Anniversary of Academician of National Academy of Sciences of Ukraine, Professor Yu. O. Mitropolskiy (1917-2008). June 7-10, 2017, Kyiv, Ukraine.
- On approximative properties of multipoint boundary-value problems. International Conference of Young Mathematicians. June 6-8, 2019, Kyiv, Ukraine.
- About approximation properties of multipoint boundary-value problems. XI International Skorobohatko Mathematical Conference. October 26–30, 2020, Lviv, Ukraine.
- About approximation properties of solutions to multipoint boundary-value problems. International Conference of Young Mathematicians. June 3–5, 2021, Kyiv, Ukraine.