CURRICULUM VITAE
VITALII STATKEVYCH

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Scientific degree: Ph.D. in Mathematics, 2012 (Institute of Mathematics of the National Academy of Sciences of Ukraine, Kyiv, Ukraine)

Research interests: functional analysis, mathematical analysis

Professional experience:

since November 2011   researcher
Institute for Applied System Analysis,
Kyiv Polytechnic Institute, Kyiv, Ukraine

Teaching experience:

since September 2012   assistant professor (mathematical analysis, discrete mathematics, mathematical logics and computation theory, linear algebra and analytic geometry, probability theory courses)
Institute for Applied System Analysis,
Kyiv Polytechnic Institute, Kyiv, Ukraine

Education:

2008–2011   Institute for Applied System Analysis, Kyiv Polytechnic Institute, Kyiv, Ukraine
post-graduate study
Ph.D. thesis: Essentially infinite-dimensional differential equations, 2012
Supervisor: Prof. Yu.V. Bogdansky

2002–2008   Institute for Applied System Analysis, Kyiv Polytechnic Institute, Kyiv, Ukraine
M.Sc. Applied Mathematics

Publications
Articles:

1. *Regular expressions for some Petri net languages for the producer/consumer problem*, System Research and Informations Technologies **3** (2020), in progress;

2. (with V. Mukhin, V. Zavgorodnii, O. Barabash, R. Mykolaichuk, Ya. Kornaga and Zavgorodnya A.) *Method of restoring parameters of information objects in a unified information space based on computer networks*, International Journal of Computer Network and Information Security (IJCNIS), Hong Kong, vol. 12, **2** (2020) 11–21 (Scopus);

3. (with N.V. Andreev) *Some control problems for non-homogeneous birth-death processes*, System Research and Information Technologies **3** (2016), 101–117;

4. *Connection between Petri nets and Polish notation*, System Research and Information Technologies **2** (2016), 7–13;

5. (with N.V. Andreev) *On one optimal control problem for the first-order linear equation with essentially infinite-dimensional elliptic operator*, Analysis, Modeling and Control, Book of papers on applied nonlinear department of IASA NTUU "KPI" **2** (2015), 58–63;

6. *The application of essentially infinite-dimensional elliptic operator to functions $f(x, u(x))$ and $f(x, u_1(x), \ldots, u_m(x))$*, Research Bulletin of NTUU "KPI" **4** (2015), 76–84;

7. *On the heat equation with operators of the Laplace-Lévy type*, Analysis, Modeling and Control, Book of papers on applied nonlinear department of IASA NTUU "KPI" **1** (2013), 142–149;

8. *Differential equations of linear type with essentially infinite-dimensional operator*, Bukovyns'kyi Matematychnyi Zhurnal **1** (2013), No. 3–4, 144–147;

9. (with Yu.V. Bogdansky) *The Cauchy problem for the simplest evolution nonregular equation*, Spectral and Evolution Problems **22** (2012), Simferopol, 23–27;

10. *Investigation of solutions of boundary-value problems with essentially infinite-dimensional elliptic operator*, Ukrains'kyi Matematychnyi Zhurnal **64** (2012), No. 2, 229–236; English translation: Ukrainian Mathematical Journal **64** (2012), No. 2, 262–272 (Scopus);

11. *Cramer's rule analog for simultaneous linear differential equations with nonregular elliptic operator*, Bulletin of Tavrida National V.I. Vernadsky University **24(63)** (2011), No. 3, 89–97;

12. (with Yu.V. Bogdansky) *The abstract Picard theorem and essentially infinite-dimensional equations*, Spectral and Evolution Problems **21**, issue 1 (2012), Simferopol, 61–65;

13. *Systems of essentially infinite-dimensional differential equations*, Ukrains'kyi Matematychnyi Zhurnal **63** (2011), No. 9, 1257-1262; English translation: Ukrainian Mathematical Journal **63** (2011), No. 9, 1433–1440 (Scopus);

14. (with Yu.V. Bogdansky) *Nonlinear equations with essentially infinite-dimensional differential operators*, Ukrains'kyi Matematychnyi Zhurnal **62** (2010), No. 11, 1571–1576; English translation: Ukrainian Mathematical Journal **62** (2010), No. 11, 1822–1827 (Scopus);

15. *On one boundary-value problem with essentially infinite-dimensional elliptic operator*, Spectral and Evolution Problems **20** (2010), Simferopol, 189-192;

16. (with Yu.V. Bogdansky) *Linear differential equations with essentially infinite-dimensional operators*, Research Bulletin of NTUU "KPI" (2008), **2**, 144–147.

Theses:

1. (with V. Mukhin) *On one context-free language for producer/consumer Petri net with the unbounded buffer*, 15th International Conference on Development and Application Systems (DAS), Suceava, Romania, May 21–23 (2020), 137–140 (Scopus);

2. (with I.S. Stankov) *To realisation of chromatic polynomial calculation algorithm*, XVII Ukrainian Scientific and Practical Conference "Theoretical and Applied Problems of Physics, Mathematics and Informatics", "KPI", Kyiv, Ukraine, April 25–26 (2019), 156–157;

3. *On regular expressions for producer/consumer Petri net languages with bounded buffer*, The nonlinear analysis and applications: Materials of 4th International Conference on memory of corresponding member of National Academy of Science of Ukraine V.S. Melnik, NTUU "KPI", Kyiv, Ukraine, April 4–6 (2018), 68;

4. (with M.V. Andreev) *On one control problem of nonhomogeneous birth and death process: the case of linear growth model with immigration*, Seminar "Applied problems and IT-technologies", Chernivtsi, Ukraine, June 9–10 (2017), 34–36;

5. *Regular expressions for producer/consumer Petri net languages with bounded buffer of size 1 and 2*, System Analysis and Information Technology, 19th International Conference SAIT (May 22 – 25, 2017, Kyiv, Ukraine), Proceedings, IASA NTUU "KPI" (2017), 122;

6. (with N.V. Andreev) *On the control problem of nonhomogeneous birth and death process*, System Analysis and Information Technology, 18th International Conference SAIT (May 30 – June 2, 2016, Kyiv, Ukraine), Proceedings, IASA NTUU "KPI" (2016), 50;

7. (with N.V. Andreev) *On one stabilization problem of the solution of the essentially infinite-dimensional equation*, The nonlinear analysis and applications 2015: Materials of 3rd international conference on memory of corresponding member of National Academy of Science of Ukraine V.S. Melnik (April 1–3, 2015, Kyiv), NTUU "KPI" (2015), 9;

8. *On the infinite-dimensional analogs of the heat equation with operators of the Laplace-Lévy type*, Analysis, Modeling and Control, Book of papers on applied nonlinear department of IASA NTUU "KPI" **1** (2013), 182–183;

9. *On the heat equation with essentially infinite-dimensional elliptic operator*, International Conference "Crimea Autumn Mathematical School-Symposium", Book of Abstracts, Simferopol (2013), 40;

10. *The Cauchy problem for the simplest evolution nonregular equation*, International Conference "Crimea Autumn Mathematical School-Symposium", Book of Abstracts, Simferopol (2012), 65;

11. *Essentially infinite-dimensional differential equations of linear type*, Conference "Differential equations and their applications in applied mathematics", Chernivtsi, Ukraine, June 11–13 (2012), 99;

12. *Dirichlet problem for the nonlinear equation with essentially infinite-dimensional elliptic operator: the continuous dependence of solution on boundary values*, The nonlinear analysis and applications 2012: Materials of 2nd international conference on memory of corresponding member of National Academy of Science of Ukraine V.S. Melnik (April 4–6, 2012, Kyiv), NTUU "KPI" (2012), 103;

13. *The continuous dependence of the solution of the nonlinear equation with essentially infinite-dimensional operator on the right-hand side*, Conference "Actual problems of applied mathematics, informatics and mechanics", 26–28 September, 2011, Voronezh, Russia, (2011), 44–45;

14. *On one system of essentially infinite-dimensional equations*, International Conference "Crimea Autumn Mathematical School-Symposium", Book of Abstracts, Simferopol (2011), 51;

15. *The Dirichlet problem for the linear equation with essentially infinite-dimensional elliptic operator*, Pontryagin Readings–XXII at Voronezh Spring Mathematical School "Modern Methods in Theory of Boundary Value Problems", Voronezh, Russia (2011), 180;

16. (with Yu.V. Bogdansky) *Nonlinear essentially infinite-dimensional equations*, International Conference "Crimea Autumn Mathematical School-Symposium", Book of Abstracts, Simferopol (2010), 48.

Books:

1. (with I.Ya. Spectorsky) *Formal languages and automata: Coursebook*, Kyiv, NTUU "KPI" (2019); "Politechnika" NTUU "KPI" (2020), 167 p.

2. (with I.Ya. Spectorsky and O.V. Stus') *Methodological recommendations for calculation works in Discrete mathematics: Workbook*, Kyiv, NTUU "KPI" (2017), 84 p.

3. (with I.Ya. Spectorsky and O.V. Stus') *Discrete mathematics. Exercises: Workbook*, Kyiv, NTUU "KPI" (2015), 103 p.

Conferences, Schools and Seminars:

1. Webinar Series "Teaching in Times of Crisis: Learning from Educators around the World" (July 24, July 31, August 6, 2020, Hamilton Lugar School of Global and International Studies, Indiana University, USA);

2. 15th International Conference on Development and Application Systems (DAS) (May 21–23, 2020, Suceava, Romania);

3. XVII Ukrainian Scientific and Practical Conference "Theoretical and Applied Problems of Physics, Mathematics and Informatics" (April 25–26, 2019, Kyiv, Ukraine);

4. Conference of memory of corresponding member of National Academy of Sciences of Ukraine V.S. Melnik "Nonlinear analysis and applications" (Fourth April 4–6, 2018, Kyiv, Ukraine; Third April 1–3, 2015, Kyiv,Ukraine; Second April 4–6, 2012, Kyiv, Ukraine);

5. Seminar "Applied problems and IT-technologies", (June 9–10, 2017, Chernivtsi, Ukraine);

6. System Analysis and Information Technology, International Conference SAIT (19th May 22–25, 2017, Kyiv, Ukraine; 18th May 30 – June 2, 2016, Kyiv Ukraine);

7. International Conference "Crimea Autumn Mathematical School-Symposium" (September 22 – October 4, 2013, Sudak, Ukraine; September 17–29, 2011, Laspi-Batiliman, Ukraine; September 18–29, 2010, Laspi-Batiliman, Ukraine; September 17–29, 2009, Laspi-Batiliman, Ukraine);

8. Conference "Differential equations and their applications in applied mathematics" (June 11–13, 2012, Chernivtsi, Ukraine).

Languages: English [B2 First (FCE)], Ukrainian and Russian.