

ALEKSANDRA LUKINA

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- **Education & Qualifications:**

2016 – PhD. Thesis title, “Mathematical Modeling of International Labor Migration”. (Russian Scientific Degree “Candidate of Science in Physics and Mathematics”).

2012 – 2015: postgraduate student of Saint Petersburg State University, Faculty of Applied Mathematics and Control Processes, Department of Mathematical Modeling of Economic Systems.

2014: Master’s Diploma with honors, area of specialization: Economics. Additional certificate of completion “Welfare Economics” [in English] (an excellent mark).

2012 – 2014: student of the Department of Economics of the European University at Saint Petersburg, graduate program “Modern economics: theory and practice”.

2012: Diploma with conferring the qualification (academic degree) of Mathematician, Specialist level (Level 5A in ISCED classification of UNESCO), area of specialization: Partial Differential Equations.

2007 – 2012: student of Saint Petersburg State University, Mathematics and Mechanics Faculty.

- **Professional Positions:**

September 2019-present: postdoctoral researcher at the Harris School of Public Policy, the University of Chicago.

September 2019-May 2019: visiting lecturer and postdoctoral associate at Cornell University, Economics Department.

June-August 2018: postdoctoral research fellow at the University of Wisconsin-Madison (Wisconsin Russia Project).

January-May 2018: postdoctoral associate at Cornell University.

September-December 2017: postdoctoral research fellow at the University of Wisconsin-Madison.

2015 – 2018: Saint Petersburg State University, Faculty of Applied Mathematics and Control Processes, Department of Mathematical Theory of Economic Decision Making, senior lecturer.

2011 – 2017: teacher of additional education at Lycee №281, Saint Petersburg.

- **Grants and Awards:**

2018 – present: Russian Foundation for Basic Research. Project title: “Modeling of demographic and economic processes interaction in a society with a migration inflow”.

2017 – 2018: Carnegie Corporation of New York postdoctoral research fellowship at the University of Wisconsin-Madison.

2013 – 2015: Presidential scholarship, Saint Petersburg State University.

2013: Gazprombank scholarship, European University at Saint Petersburg.

- **Teaching:**

Intergenerational Mobility: Theoretical and Empirical Overview (graduate course) and Introduction to Intergenerational Mobility (undergraduate course), spring term 2020 at the Harris School of Public Policy, the University of Chicago.

Intermediate Mathematical Economics I, Cornell University, PhD course.

Modeling of Socioeconomic Systems, Mathematical Modeling in Economics, Introduction to Econometrics, Mathematical Analysis, Saint Petersburg State University, undergraduate.

- **Scientific Interests:**

Income inequality, intergenerational mobility, economic growth, international labor migration, demography and mathematical tools to study these problems.

- **Papers:**

In progress:

1. “Economic Growth in the Short Run. Optimally Approaching the Turnpike”, with Lawrence Blume.
2. “Stepping Stones and Bottlenecks in Income Inequality Dynamics”, with Lawrence Blume and Steven Durlauf.
3. “Dynastic Competition in Intergenerational Model of the Distribution of Wealth”, with Lawrence Blume and Steven Durlauf.

Published:

4. Blume L., Lukina A. “A Note on Migration Perturbation and Convergence Rates to a Steady State” // Program Systems: Theory and Applications, Vol. 11, No. 4(47), 2020, pp. 17-30. DOI: 10.25209/2079-3316-2020-11-4-17-30.
5. Blume L., Durlauf S., Lukina A. “Poverty Traps in Markov Models of the Evolution of Wealth” // WZB Discussion Paper, No. SP II 2020-303. <https://www.econstor.eu/bitstream/10419/215416/1/1693170906.pdf>
6. Popov I., Krylatov A., Lukina A. “Pricing Mechanisms for Day-ahead Demand Management in Multi-Generator Power Grid” // 2016 International Conference on Recent Advances and Innovations in Engineering (ICRAIE). DOI: 10.1109/ICRAIE.2016.7939499.

7. Lukina A., Prasolov A. "High-End Technologies Management" // Young Researchers in Vacuum Micro/Nano Electronics (VMNE-YR) Conference Proceedings, pp. 1-4. DOI: 10.1109/VMNEYR.2016.7880408.
8. Lukina A., Prasolov A. "The Labor Immigration Control" // International Journal of Pure and Applied Mathematics, Vol. 108, No. 3, 2016, pp. 659–669. DOI: 10.12732/ijpam.v108i3.16.
9. Lukina A., Prasolov A. "The Model of One-Way Migration Flow "Donor-Recipient"" [in Russian] // International Conference "Government and Business, Modern Economic Problems" Proceedings, 2016, pp. 71-76.
10. Lukina A. "About the Labor Immigration Control in Russian Federation" [in Russian] // Finances and Business, No. 2, 2015, pp. 41-56.
11. Lukina A., Prasolov A. "Analysis and Mathematical Modeling of International Labor Migration" [in Russian] // Administrative Consulting, No. 10, Is. 82, 2015, pp. 146–156.
12. Lukina A. Prasolov A. "A Mathematical Model of Economic Growth Connecting Demographic Setting with Controlled Migration" // AIP Conference Proceedings 1648, 450007 (2015). DOI: 10.1063/1.4912666.6.
13. Lukina A. "The Russian Population Forecast Based on Variable Leslie Matrix" [in Russian] // Control Processes and Stability Conference Proceedings 2014, Vol. 1, No. 1, pp. 482-487.
14. Lukina A., Prasolov A. "Numerical aspects of one migration model" // Computer Technologies in Physical and Engineering Applications (ICCTPEA), 2014 International Conference on, pp. 79–80. DOI: 10.1109/ICCTPEA.2014.6893290.
15. Lukina A. "Mathematical Modeling of Migration Processes" [in Russian] // All-Russian Conference dedicated to the memory of professor Ovsievich "Economic Mathematical Researches: mathematical models and information technologies" Proceedings, pp. 125-127.
16. Arkhipova A., Lukina A. "Regularity of Weak Solutions to the Model Venttsel Problem for Linear Divergence Elliptic Operators in Campanato Spaces" // Journal of Mathematical Sciences, 2013, Vol. 195, Is. 5, pp. 609-621.
17. Arkhipova A., Lukina A. "Estimates for solutions to the model Venttsel problem in Campanato spaces" // Journal of Mathematical Sciences, 2013, Vol. 191, Is. 2, pp. 150-161.

• Presentations:

1. St. Petersburg Economic Seminar (HSE, EU, PDMI), January 16, 2020.
2. 5th International Workshop on Economic Growth, Environment and Natural Resources, St. Petersburg, May 31-June 1, 2019.
3. Research Seminar named after S. Pechersky, Department of Economics, European University at St. Petersburg, January 25, 2019.
4. Wisconsin Russia Project Young Scholars Conference, Madison, 26-27 July, 2018.
5. International Workshop "Social Interaction and Human Capital", European University at St. Petersburg, May 21, 2018.
6. The Cambridge-INET Institute Theory Workshop, 1-3 May, 2018.
7. NES-HCEO Summer School on Socioeconomic Inequality, Moscow, August 28 to September 2, 2017.
8. IV NES CSDSI winter school "Cultural Diversity and Income Inequality", Yekaterinburg, 2016.
9. International Conference "Government and Business, Modern Economic Problems", St. Petersburg, 2016.
10. St. Petersburg Institute for Informatics and Automation of the Russian Academy of Sciences, 2016.
11. Institute of Applied Mathematical Research of Karelian Research Center of the Russian Academy of Sciences, 2015.

12. The II NES CSDSI summer school “Culture, Institutions and Diversity”, Baikal, 2015.
13. International Conference of Numerical Analysis and Applied Mathematics, Greece, 2014.
14. IVESC-ICEE-ICCTPEA-BDO, St. Petersburg, 2014.
15. XLV International Scientific Conference on Control Processes and Stability, St. Petersburg, 2014.
16. All-Russian Conference dedicated to the memory of professor Ovsievich “Economic Mathematical Researches: mathematical models and information technologies”, Russian Academy of Sciences, St. Petersburg, 2013.
17. XLIV International Scientific Conference on Control Processes and Stability, St. Petersburg, 2013.

- **Professional Service:**

Program Committee, Internet Science Conference 2018 (organized by Saint Petersburg State University).

Reviewer for Applied Mathematical Modelling.

- **Languages:**

English (fluent), Russian (native).