

# Andrii Goriunov

## Curriculum Vitae

November 2015

Personal: Born: December 21, 1984.  
Citizen: Ukraine. Gender: male.  
Work: Department of Nonlinear Analysis,  
Institute of Mathematics,  
National Academy of Sciences of Ukraine,  
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### Education

- 2011 Ph.D. (Math.) Institute of Mathematics, NAS of Ukraine  
*Thesis:* One-dimensional Differential Operators with Distributional Coefficients  
*Supervisor:* Prof. V. A. Mikhailets  
2007 Masters degree (Math.) Taras Shevchenko National University of Kyiv.

### Employment

- Since December 2015 Senior researcher Institute of Mathematics, NAS of Ukraine  
2013 – 2015 Researcher Institute of Mathematics, NAS of Ukraine  
2010 – 2013 Junior researcher Institute of Mathematics, NAS of Ukraine.

### Awards and Grants

- Scholarship of National Academy of Sciences of Ukraine for young scientists, 2013 – 2014.
- Participated in Grant of National Academy of Sciences of Ukraine and Siberian Branch of Russian Academy of Sciences "Inverse Problems of Modern Mathematical Physics", 2013 – 2014.
- Participated in Grant of National Academy of Sciences of Ukraine and Russian Academy of Sciences "Modern theory of evolution problems: fractional equations, integrated semigroups, numerical analysis, spectral theory", 2012 – 2013.
- Research stay at Université Paris-Sud, France due to Grant of French Embassy in Ukraine and CNRS, 2011.
- 1 place in the Young Scientists Competition at the Humboldt Kolleg 2010 "Mathematics and life sciences: possibilities, interlacements and limits", Kyiv, Ukraine, 2010.

### Activities

- Secretary of the Young Scientists' Board of the Institute of Mathematics, Kyiv, Ukraine, 2014 – present.
- Member of the Program Committee of International Conference of Young Mathematicians, Kyiv, Ukraine, 2015.
- Member of the Organizing Committee of the Humboldt Kolleg 2014 "The Education and Science and their Role in Social and Industrial Progress of Society", Kyiv, Ukraine, 2014.
- Member of the Organizing Committee of the 2nd EUMLS Conference on Mathematics for Life Sciences, Olenivka, Crimea, Ukraine, 2013.
- Member of the Organizing Committee of the EUMLS Workshop on Mathematics for Life Sciences, Kyiv, Ukraine, 2012.
- Scientific secretary of the Humboldt Kolleg 2010 "Mathematics and life sciences: possibilities, interlacements and limits", Kyiv, Ukraine, 2010.
- Member of the Organizing Committee of the Ukrainian Mathematical Congress, Kyiv, Ukraine, 2009

### Research interests

Operator theory, spectral theory, differential operators.

## Publications

### Journal Articles

- On extensions of even-order symmetric quasidifferential operators (in Russian). *Reports of NAS of Ukraine*, 2009, no. 4, 19–24. (A. S. Goriunov, V. A. Mikhailets)
- On extensions of odd-order symmetric quasidifferential operators (in Russian). *Reports of NAS of Ukraine*, 2009, no. 9, 27–31. (A. S. Goriunov, V. A. Mikhailets)
- Resolvent convergence of Sturm–Liouville operators with singular potentials. *Mathematical Notes*, 87 (2010), no. 1–2, 287–292, see also *arXiv:1001.4160*. (A. S. Goriunov, V. A. Mikhailets)
- Regularization of singular Sturm–Liouville equations. *Methods of Functional Analysis and Topology*, 16 (2010), no. 2, 120–130, see also *arXiv:1002.4371*. (A. S. Goriunov, V. A. Mikhailets)
- Regularization of binomial differential equations with singular coefficients, (in Russian). *Proceedings of Institute of mathematics of NAS of Ukraine*, 7 (2010), no. 1, 49–67. (A. S. Goriunov, V. A. Mikhailets)
- Regularization of two-term differential equations with singular coefficients by quasiderivatives. *Ukrainian Mathematical Journal*, 63 (2012), no. 9, 1361–1378, see also *arXiv:1106.3275*. (A. S. Goriunov, V. A. Mikhailets)
- Formally self-adjoint quasi-differential operators and boundary-value problems, *Electronic Journal of Differential Equations*, 2013 no. 101, 1–16, see also *arXiv:1205.1810*. (A. S. Goriunov, V. A. Mikhailets, K. Pankrashkin)
- Convergence of two-term differential operators with singular coefficients (in Russian). *Proceedings of Institute of mathematics of NAS of Ukraine*, 10 (2013), no. 2, 112–124. (A. S. Goriunov, V. A. Mikhailets)
- Multi-interval Sturm-Liouville boundary-value problems with distributional potentials. *Reports of NAS of Ukraine*, 2014, no. 7, 43–47, see also *arXiv:1508.05936*. (A. S. Goriunov)
- On multi-interval boundary problems for differential equations with distributional coefficients (in Russian). *Proceedings of Institute of mathematics of NAS of Ukraine*, 12 (2015), no. 2, 126–138. (A. S. Goriunov)
- Convergence and approximation of the Sturm-Liouville operators with potentials-distributions. *Ukrainian Mathematical Journal*, 67 (2015), no. 5, 680–689. (A. S. Goriunov)

### Conference Presentations

- Dissipative boundary value problems for the quasidifferential equations, International conference "Modern problems of mathematics, mechanics and their application", Moscow, Russia, March 30 – April 2, 2009
- On resolvent convergence of the Sturm-Liouville operators with singular potentials, International conference "Analytic methods of mechanics and complex analysis", Kyiv, Ukraine, June 29 – July 5, 2009.
- On the Sturm–Liouville operators with singular potentials convergence, Ukrainian Mathematical Congress, Kyiv, Ukraine, August 27–29, 2009.
- Formally self-adjoint quasi-differential operators, Ukrainian Mathematical Congress, Kyiv, Ukraine, August 27–29, 2009.
- On regularization of singular Sturm–Liouville equations, XIII M. Kravchuk Memorial Conference, Kyiv, Ukraine, May 13–15, 2010.
- On one-dimensional differential operators with distribution coefficients, Humboldt Kolleg 2010 "Mathematics and life sciences: possibilities, interlacements and limits", Kyiv, Ukraine, August 05–08, 2010.

- On Sturm-Liouville problems with singular coefficients, International conference "Modern problems of analysis and teaching of mathematics", Moscow, Russia, May 17–19, 2010.
- Sturm-Liouville expressions with distribution coefficients, The 8th ISAAC Congress, Moscow, Russia, August 22–27, 2011.
- Shin-Zettl quasi-differential operators and boundary problems, EU-Ukrainian Workshop "Mathematics for Life Sciences", Kyiv, Ukraine, September 3–14, 2012.
- Formally self-adjoint quasi-differential operators and boundary problems, Bogolyubov readings DIF-2013, Sevastopol, Ukraine, 23–30 July, 2013.
- Boundary problems for formally self-adjoint quasi-differential expressions, Crimea International Mathematical Conference, Sudak, Ukraine, September 22 – October 4, 2013.
- Boundary-value problems for quasi-differential equations, International conference "Differential equations, computational mathematics, function theory and mathematical methods of mechanics", Kyiv, Ukraine, April 23–24, 2014.
- Multi-interval Sturm-Liouville boundary-value problems with singular potentials, Humboldt Kolleg 2014 "Education and Science and their Role in Social and Industrial Progress of Society", Kyiv, Ukraine, June 12–15, 2014.
- Approximation of Sturm-Liouville operators with distributional potentials, International Conference of Young Mathematicians, Kyiv, Ukraine, June 3–6, 2015.