



maria nastych

Fields of interest

Economist, mathematician
Game theory, IO, Mergers.

Education

- 2012–2014 M.Ec., Financial economy, Faculty of Economics, European university at Saint Petersburg (EUSP). Russia
- 2007–2012 Economist–mathematician, Saint Petersburg State University (SPbSU). Saint Petersburg, Russia

Work experience

- since 2017 **Lecturer**, *Department of Economics, NRU HSE, Saint Petersburg, Russia.*
- since 2013 **Teaching Assistant**, *Faculty of Liberal Arts and Sciences, Smolny College SPbSU, Saint Petersburg, Russia.*
- 2013–2015 **Research Assistant**, *CMSSE, NRU HSE, Moscow, Russia.*
- 2011, 2014 **Trainee in the researching department of Theoretical Economics**, *Saint Petersburg Institute for Economics and Mathematics RAS, Saint Petersburg, Russia.*
- 2011–2012 **IT support specialist**, *Analytical department, Investment company "Bultic Finance Agency" and JSC "Bank BFA", Saint Petersburg, Russia.*
- 2011 **Trainee in the strategic development department**, *Bank "Saint Petersburg", Saint Petersburg, Russia.*

Main Publications

- 2018 Petrosian O., Nastych M., Volf D. Non-cooperative Differential Game Model of Oil Market with Looking Forward Approach, in: *Frontiers of Dynamic Games. Game Theory and Management*, St. Petersburg, 2017 — Springer, 2018
- 2017 Petrosian O., Nastych M., Volf D. Differential Game of Oil Market with Moving Informational Horizon and Non-Transferable Utility, in: *2017 Constructive Nonsmooth Analysis and Related Topics (Dedicated to the Memory of V.F. Demyanov)*, CNSA 2017 — Proceedings. Institute of Electrical and Electronics Engineers Inc., Springer, 2017. pp. 251–254

4/1 Kollontai Str. • 193318, Saint Petersburg, Russia

☎ +7 (911) 25 25 295 • ✉ nastych@bk.ru

- Date and place of birth: 21/06/1988 Krasnodar, Russia

- 2016 Nastych M. *Strong Nash Equilibrium in Cournot and Bertrand Oligopolies*, SSRN, <http://ssrn.com/abstract=2801408> (Preprint)
- 2016 Sloev I., Nastych M. *Coordination within a Supply Chain with a Profit Sharing Contract*, SSRN, <http://ssrn.com/abstract=2748286> (Preprint)
- 2016 Nastych M.A. *Modern methods of investigation of firms' economic integration*, Journal of Economy and entrepreneurship, Vol. 10, Nom. 4(2), pp. 558–567 (in Russian)
- 2016 Nastych M.A., Kepke K.M. *Economic integration of heterogeneous firms: Cournot–Nash equilibrium*, Journal of Economy and entrepreneurship, Vol. 10, Nom. 4(2), pp. 887–892 (in Russian)
- 2016 Nastych M.A. *Merger Simulation: Evidence from the Education Market*, Journal of Modern Competition, Vol. 10., No. 1(55), pp. 60–69 (in Russian)
- 2015 Nastych M.A. *Fair Value of Firms Within the Economic Integration*, Finance and credit, 43(667), pp. 53–66 (in Russian)
- 2014 Nastych M.A. , Balashov N.D. *Evolution of Agents Behavior in the Labor Market*, Contributions to Game Theory and Management, Vol. 7, pp. 239—245
- 2014 Nastych M.A. *M&A Cooperative Games*, Equilibrium. Quarterly Journal of Economics and Economic Policy, Vol. 9, Issue 1, pp. 119–130

Conference presentations for the last three years

- 2018 *A differential game model of the oil market with non-transferable utility and a moving information horizon* with Petrosian Ovanes, XIX April International Academic Conference On Economic and Social Development, NRU HSE, Moscow, Russia
- 2017 *Looking Forward Approach in Cooperative Differential Games with Non Transferable Utility* with Petrosian Ovanes, The Eleventh International Conference on Game Theory and Management, SPbSU, Saint–Petersburg, Russia
- 2017 *Introduction of Quotas for Production Volumes: Stochastic Cooperative Game on the Oil Market*, The 5th International Conference on Dynamics Games and Science 2017 and the 18th Jornadas Latinoamericanas de Teoría Económica, Escuela Superior de Economía of the Instituto Politécnico Nacional, Mexico City, Mexico
- 2017 *Differential Game of Oil Market with Moving Informational Horizon and Non–Transferable Utility* with Ovanes Petrosian and Dmitrii Volf, International Conference "Constructive Nonsmooth Analysis and Related Topics", Euler International Mathematical Institute, Saint–Petersburg, Russia
- 2016 *Strong Nash Equilibrium in Cournot and Bertrand Oligopolies*, International Scientific Workshop named after academician Shatalin S.S. "System modeling of social and economic processes", Central Economics and Mathematics Institute RAS, Saint–Petersburg, Russia
- 2016 *A non–cooperative differential game of advertising goodwill: application to the real estate market of St Petersburg* with Mario Alberto Garcia Meza, The Tenth International Conference on Game Theory and Management, SPbSU, Saint–Petersburg, Russia

4/1 Kollontai Str. • 193318, Saint Petersburg, Russia

☎ +7 (911) 25 25 295 • ✉ nastych@bk.ru

• Date and place of birth: 21/06/1988 Krasnodar, Russia

- 2016 *Strong Nash equilibrium in oligopoly market with horizontal integration*, The Tenth International Conference on Game Theory and Management, SPbSU, Saint-Petersburg, Russia

Courses, seminars and workshops for the last 3 years

- 01/2017 IWT Workshop "**Best Practices for Syllabus and Assignment Design**", Bard College USA, St. Petersburg, Russia;
- 10/2016 Autumn School "**Computational Social Choice and Fair Division**", NRU HSE, Saint Petersburg, Russia;
- 07/2016 **Senior Project Assessment** Seminar, Bard College, Annandale-on-Hudson, NY USA;
- 07/2016 IWT July Weeklong Workshop "**Writing to Learn in the STEM Disciplines**", Bard College, Annandale-on-Hudson, NY USA;
- 03/2016 Course on "**Interactive Methods of Teaching in the System of Modern Education**", Smolny College, St. Petersburg, Russia;
- 01/2016 Combined "**English as a Second Language**" and "**American Cinema**" Seminar, Bard College, Annandale-on-Hudson, NY USA;

Teaching experience

Department of
Economics NRU
HSE

"**Public Economics**" (in English).

Smolny College
SPSU

"**Game theory and conflicts resolution**" (in Russian, in English), "**Microeconomics II**", "**Social Networks: modeling and analysis**", "**Qualitative and quantitative methods**", "**Auctions**" (in English).

Economic
Faculty SPSU

"**Game theory**", "**Game theory II**", "**Macroeconomics**", "**Microeconomics**", "**Financial calculations**", "**Mathematical methods in economics**".

Significant Honors and Scholarships

- 2014, 2015 Young Faculty Support Program (Group of Young Academic Professionals), Category "New Researchers". NRU HSE;
- 2014 Competition for the best students' scientific publication: 2d degree for the article *M&A Cooperative Games*, (2014) EUSP;
- 2013 BP scholarship. EUSP;
- 2011 Academician Nikolai Fedorenko International Scientific Foundation of Economic Research scholarship. Moscow, Russia;
- 2011 International science conference (diploma of the 1st degree), SPbSU. Saint Petersburg, Russia;
- 2010–2011 Bank Santander scholarship, 6 months exchange program, Universidad Complutense de Madrid. Madrid, Spain;
- 2010 International science conference (diploma of the 3d degree), SPbSU. Saint Petersburg, Russia.

4/1 Kollontai Str. • 193318, Saint Petersburg, Russia

☎ +7 (911) 25 25 295 • ✉ nastych@bk.ru

- Date and place of birth: 21/06/1988 Krasnodar, Russia

Computer skills

Advanced user Maple, Mathematica, MATLAB, ArcGIS, Pajek, Gephi, R, EViews, Statistica, STATA, SPSS, Thomson Reuters, Bloomberg, Quick, TSLab, StreamBase, VBA, SQL, PowerShell, InDesign, LaTeX

Membership

New Economic Association, Russia
Board of Young Scientists, Smolny College SPbSU, Russia
Faculty Evaluation Oversight Committee, Smolny College SPbSU, Russia and Bard College of Levy Institute, USA

Languages

Russian **Native**
English **Advanced**

Interests

Traveling (couchserfing), theater, contemporary and actual art

Personal qualities

Broad-minded, communicability, motivated

4/1 Kollontai Str. • 193318, Saint Petersburg, Russia

☎ +7 (911) 25 25 295 • ✉ nastych@bk.ru

• Date and place of birth: 21/06/1988 Krasnodar, Russia