CURRICULUM VITAE

Polina Yu. Glazyrina

Address:

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Personal:

Date of Birth: August 29, 1979 Citizenship: Russian

Education:

2005: Cand. Sc. (Physics and Mathematics), Ural State University
Supervisor: Vitalii V. Arestov
Thesis: Extremal properties of algebraic polynomials in L₀-space on an interval
2002: M.S. Degree in Mathematics, Ural State University
Supervisor: Vitalii V. Arestov
Thesis: Limiting case of the inequality of different metrics for algebraic polynomials
on an interval

Employment:

09.2011-present: Docent (associate professor), Ural Fedral University 09.2007-2010: Docent (associate professor), Ural State University 09.2001-08.2007: Assistant (instructor), Ural State University

Courses taught in Russian:

Mathematical analysis Theory of functions of real variable Functional analysis Harmonic analysis Analytical methods in theory of numbers

Conference Talks:

- 24.08–32.08.2013: Second International Conference "Mathematics in Armenia: Advances and Perspectives", Tsaghkadzor, Armenia. Abstracts.
- 09.06–15.06.2013: Conference "Constructive Theory of Functions", Sozopol, Bulgaria.
- 17.09–21.09.2012: Conference "Modern Problems of Mathematics, Mechanics, Information science", Tula, Russia.
- 22.08–27.08.2011: 8th International ISAAC Congress (The International Society for Analysis, its Applications and Computation), Moscow, Russia.
- 06.05–08.05.2010: International Workshop "Approximation Theory", St. Petersburg, Russia.
- 22.08–26.08.2009: Conference "Function Methods in Approximation Theory and Operator Theory III", dedicated to the memory of V.K. Dzyadyk (1919-1998), Volyn, Ukraine.
- 01.09–06.09.2008 Conference "Algorithmic Analysis of Unstable Problems Ekaterinburg, Russia.
- 03.06–09.06.2008: Conference "Constructive Theory of Functions 08", Campos do Jordão, Brazil.
- 28.01–04.02.2008: Conference "Modern Problems of Theory of Functions and Their Applications" (The 14-th Winter School in Saratov), Saratov, Russia.
- 18.09–24.09.2007: Second Workshop on Extremal Problems in Fourier Analysis, Budapest, Hungary.
- 01.08–10.08.2007: Summer School on Function Theory (Stechkin's Conference), Tula, Russia.
- 28.11–30.11.2006: Conference "Modern Problems of Mathematics, Mechanics, Information Science", Tula, Russia.
- 27.01–03.02.2006: Conference "Modern Problems of Theory of Functions and Their Applications" (The 13-th Winter School in Saratov), Saratov, Russia.
- 13.10–17.10.2004: Conference on Multivariate Approximation and Interpolation, with Applications (MAIA 2004), University of Hohenheim, Germany.
- 04.02–05.02.2005: 15th Rhein-Ruhr-Workshop on Applied Analysis, Approximation Theory, CAGD and Numerical Methods, Burg Gemen, Germany.
- 12.04–16.04.2004: Conference "The XXVI Conference of Young Scientists", Moscow State University, Russia.
- 02.02–06.02.2004: Conference "Algorithmic Analysis of Unstable Problems", Ekaterinburg, Russia.
- 26.01–04.02.2003 : Conference "Modern Methods of Theory of Functions and Adjacent Problems" (The Winter School in Voronezh), Voronezh, Russia.
- 28.01–4.02.2002: Conference "Modern Problems of Theory of Functions and Their Applications" (The 11-th Winter School in Saratov), Saratov, Russia.

- 01.08–10.08.2001, 2002, 2003, 2004, 2011, 2012, 2013 Summer School on Function Theory (Stechkin's Conference), Miass, Russia.
- 26.02–02.03.2001: Conference "Algorithmic Analysis of Unstable Problems", Ekaterinburg, Russia.
- 01.08–12.08.2000: Summer School on Function Theory (Stechkin's Conference), Miass, Russia.

Awards and Scholarships:

- 09.2011-02.2012: Visiting research fellow at the Centre de Recerca Matemàtica in the group of Sergey Tikhonov (Spain);
- 2008: Award of the Ural Mathematical Society;
- 10.2004–03.2005: DAAD (German Academic Exchange Service) Scholarship at University of Hohenheim in the group of Kurt Jetter (Germany);

2002–2003: Scholarship of the President of the Russian Federation for PhD students.

2002: 1st prize of the Ural contest of students' scientific works.

Grants:

Russian Foundation for Basic Research, project 12-01-31495 "Extremal properties of algebraic and trigonometric polynomials".

A member of the following projects:

Projects supported by the Russian Foundation for Basic Research, project leader – V.V.Arestov, no. 02-01-00783-a (2002-2004), 05-01-00233-a (2005-2006), 08-01-00213-a (2007-2009), 11-01-00462-a (2011-2013);

Project supported by the Ministry of Education and Science of the Russian Federation, project leader – V.V.Arestov, no. 1.1544.2011 (2011–2012);

Program for State Support of Leading Scientific Schools of the Russian Federation, project leader – N.Yu.Subbotin, projects NSh-00-15-96035 (2000–2002),

NSh-1347.2003.1 (2003–2004), NSh-5120.2006.1 (2006–2007), NSh-1071.2008.1 (2008–2010);

Joint Russian–Hungarian project "Extremal problems for polynomials and positive definite functions in approximation theory and combinatorial geometry", project leaders – A.G.Babenko, Sz.Revesz (2005–2007);

Joint Russian–Chinese project, project leaders – V.V.Arestov, K.Y. Wang, no. 02-01-39007 (2002).

Advising:

Supervisor of I.E. Simonov for writing his Masters Thesis "Markov–Nikolskii inequalities in the Spaces L_{∞} , L_1 on the Segment", Ural Federal University, 2011.

Supervisor of V.V. Pakhomova for writing her Masters Thesis "Approximations for Calculating Lennard-Jones potential for Interaction between a Point and a Cylinder", Ural Federal University, 2013.

P.Yu. Glazyrina LIST OF PUBLICATIONS

Research papers

- 1. P.Yu. Glazyrina, Limiting case of the inequality of different metrics for algebraic polynomials on an interval, *East Journal on Approximation*, 9 (2003), 1–19.
- P.Yu. Glazyrina, Triangle inequality for algebraic polynomials in L₀-space on an interval, *Izvestiya Uralskogo Gosudarstvennogo Universiteta*, 30 (2004), 37– 42 (in Russian).
- P.Yu. Glazyrina, Markov-Nikol'skii inequality for the spaces L_q, L₀ on a segment, Trudy Instituta Matematiki i Mekhaniki UrO RAN, 11 (2) (2005), 60-71; English translation in Proceedings of the Steklov Institute of Mathematics, Suppl. 2 (2005), S104-S116.
- P.Yu. Glazyrina, The Markov brothers inequality in L₀-space on an interval, Matematicheskie Zametki, 78(1) (2005), 59–65; English translation in Mathematical Notes, 78 (1) (2005), 53–58.
- 5. P.Yu. Glazyrina, Extremal properties of algebraic polynomials in the space L_0 on an interval, Ph.D. Thesis, Ural State University, 2005.
- 6. P.Yu. Glazyrina, The sharp Markov–Nikol'skii inequality for algebraic polynomials in the spaces L_q and L_0 on a closed interval, *Matematicheskie Zametki*, 84 (1) (2008), 3–22; English translation in *Mathematical Notes*, 84 (1) (2008), 3–21.
- 7. P.Yu. Glazyrina, Necessary conditions for metrics in integral Bernstein-type inequalities, *Journal of Approximation Theory*, 162 (6) (2010), 1204–1210.
- V.V. Arestov, P.Yu. Glazyrina, Integral Inequalities for Algebraic and Trigonometric Polynomials, *Doklady Akademii Nauk*, 442 (6) (2012), 727–731; English translation in *Doklady Mathematics*, 85 (1) (2012), 104–108.
- A.N. Enyashin, P.Yu. Glazyrina, On the Crystallization of Polymer Composites with Inorganic Fullerene-like Particles, *Physical Chemistry Chemical Physics*, 14 (2012), 7104–7111.
- V.V. Arestov, P.Yu. Glazyrina, Sharp integral inequalities for fractional derivatives of trigonometric polynomials, *Journal of Approximation Theory*, 164 (11) (2012), 1501–1512.
- V.V. Arestov, P.Yu. Glazyrina, Bernstein–Szegö inequality for fractional derivatives of trigonometric polynomials, *Trudy Instituta Matematiki i Mekhaniki UrO RAN*, 20 (1) (2014), 17–31.

Textbooks

- 1. P.Yu. Glazyrina, M.V. Deikalova, L.F. Korkina, Linear Operators. Routine Problems. Yekaterinburg, 2010. 99 p.
- V.V. Arestov, P.Yu. Glazyrina, Introduction to the Theory of Function of Real Variable: Lebesgue Measure and Integral on the Real Line. Yekaterinburg, 2011. 165 p.
- 3. P.Yu. Glazyrina, M.V. Deikalova, L.F. Korkina, Normed Spaces. Routine Problems. Yekaterinburg, 2012. 108 p.
- 4. V.V. Arestov, P.Yu. Glazyrina, Differential Properties of functions of One Real Variablee. Yekaterinburg, 2013. 135 p.