

## CURRICULUM VITAE

**Sergey Tikhonov**

ICREA Research Professor at CRM

### Address:

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### Personal:

Date of Birth: November 11, 1976

### Education:

2003: PhD, Lomonosov Moscow State University

1999: MS, Lomonosov Moscow State University  
Diploma (summa cum laude)

1997: BS, Lomonosov Moscow State University

### Teaching Education:

1995-1999: Lomonosov Moscow State University  
Department of Pedagogical Education  
Diploma, 1999

Qualification: Teacher in Mathematics

### Academic Career:

09/12-pres: ICREA Research Professor, CRM, Barcelona, Spain,

10/08-09/12: ICREA Researcher, CRM, Barcelona, Spain,

10/06-09/08: Post-doctoral Fellow, Scuola Normale Superiore, Pisa, Italy,

09/04-09/06: Marie Curie Fellow, CRM, Barcelona, Spain,

09/00-04/04: Lecturer, Lomonosov Moscow State University, Russia

### Research Interests:

Analysis, Harmonic analysis, Approximation Theory

### Visiting Positions:

09/20-09/20: Invited Researcher, IHES, Bures-sur-Yvette, France

12/19-12/19: Invited Researcher, Shanghai Jiao Tong University, China

01/19-06/19: Invited Researcher, Isaac Newton Institute for Mathematical Sciences, Cambridge, UK

12/18-12/18: Invited Researcher, Institute of Mathematics of Acad. of Sciences, Prague, Czech Republic

03/18-04/18: Invited Researcher, Institute of Mathematics of Acad. of Sciences, Prague, Czech Republic

12/17-12/17: Research in teams, BIRS, Canada

11/17-12/17: Invited Researcher, University of Alberta, Canada

10/17-10/17: Invited Researcher, Laboratoire J.-L. Lions, Université Pierre et Marie Curie, Paris, France

09/17-09/17: Invited Researcher, IHES, Bures-sur-Yvette, France

12/16-12/16: Invited Researcher, Institute of Mathematics of Acad. of Sciences, Prague, Czech Republic

12/15-12/15: RiP Program, Mathematisches Forschungsinstitut Oberwolfach, Germany

09/15-09/15: Invited Researcher, Institute of Mathematics of Acad. of Sciences, Prague, Czech Republic

- 06/14-08/14: Invited Researcher, Hausdorff Institute for Mathematics, Bonn, Germany  
 03/14-03/14: Visiting Professor, Gumilyov Eurasian National University, Kazakhstan  
 02/14-02/14: Invited Researcher, Institute of Mathematics of Acad. of Sciences, Prague, Czech Republic  
 11/12-12/12: Invited Researcher in the framework of Oberwolfach Leibniz Program, Mathematisches Forschungsinstitut Oberwolfach, Germany  
 10/12-10/12: Invited Researcher, Erwin Schrödinger Institute for Mathematical Physics, Austria  
 04/12-04/12: Visiting Professor, Gumilyov Eurasian National University, Kazakhstan  
 04/11-04/11: Visiting Scholar, Bar-Ilan University, Israel  
 10/10-11/10: Visiting Professor, Kazakh National University Al-Farabi and Gumilyov Eurasian National University, Kazakhstan  
 04/10-04/10: Visiting Scholar, Centro de Giorgi, Pisa, Italy  
 10/09-10/09: RiP Program, Mathematisches Forschungsinstitut Oberwolfach, Germany  
 03/09-04/09: Visiting Scholar, Lomonosov Moscow State University, Russia  
 12/07-12/07: Visiting Scholar, Bar-Ilan University, Gelbart Institute, Israel  
 01/07-03/07: Visiting Scholar, Isaac Newton Institute, Cambridge, UK  
 10/06-11/06: Visiting Research Professor, University of Alberta, Canada  
 10/04-11/04: Visiting Research Professor, University of Alberta, Canada  
 04/04-07/04: Visiting Scholar, Centro de Giorgi, Pisa, Italy  
 02/04-02/04: Visiting Scholar, University of Canterbury, Christchurch, New Zealand  
 11/03-11/03: Visiting Research Scholar, Mathematical Institute, Jena, Germany  
 10/03-11/03: Visiting Research Professor, McGill University, Canada  
 08/03-10/03: Visiting Research Professor, University of Alberta, Canada

#### **Editorial Positions:**

- 2020-pres: Member of Editorial board, Advances in Operator Theory  
 2019-pres: Member of Editorial board, Journal of Fourier Analysis and Applications  
 2017-pres: Member of Editorial board, Demonstratio Mathematica  
 2017-pres: Member of Editorial board, Jaen Journal on Approximation  
 2015-pres: Member of Editorial board, Analysis Mathematica  
 2014-pres: Member of Editorial board, Journal of Mathematical Analysis and Applications  
 2010-pres: Member of Editorial board, Bulletin of Mathematical Analysis and Applications  
 2012-2019: Member of Editorial board, Abstract and Applied Analysis  
 2013-2017: Member of Editorial board, The Scientific World Journal  
 2017: Guest editor of the special issue "Function Spaces and Approximation Theory", Analysis Math., Volume 43, Issue 2, 2017

#### **Professional Activities:**

- 2009-pres: Leader of the CRM group "Harmonic Analysis and Approximation Theory"  
 Web page: [http://www.crm.cat/HarmonicAnalysis\\_Lines/defaultHarmonicAnalysis.htm](http://www.crm.cat/HarmonicAnalysis_Lines/defaultHarmonicAnalysis.htm)

#### **Conferences and programs organized:**

- April-May, 2021: Main organizer (together with Aicke Hinrichs, Boris Kashin, Denka Kutzarova, Vladimir Temlyakov) of the Research program "Applied Functional Analysis and High-Dimensional Approximation" in the Erwin Schrödinger International Institute for Mathematics and Physics, Vienna, Austria  
 Aug.2-Aug.8, 2020: Co-organizer (together with Feng Dai, Ronald DeVore, Vladimir Temlyakov) of the Banff-CMO workshop "Applied Functional Analysis", Oaxaca, Mexico, (cancelled due to COVID-19 pandemic)  
 January-June, 2019: Main organizer (together with Anders Hansen, Vladimir Temlyakov, Alexei Shadrin) of the Research program "Approximation, sampling and compression in data science" in the Isaac Newton Institute for Mathematical Sciences, Cambridge, UK

- June 17-21, 2019: Main organizer (together with Dmitriy Bilyk, Eugenio Hernandez, Alexei Shadrin) of the Workshop “Approximation, sampling, and compression in high dimensional problems”, INI, Cambridge
- June 26-30, 2017: Co-organizer of the Follow up Workshop on Approximation Theory and Function Spaces, Barcelona, Spain
- March-July, 2016: Main organizer (together with Vladimir Temlyakov) of the Research program “Constructive Approximation and Harmonic Analysis” in the Centre de Recerca Matemàtica
- May 2-6, 2016: Main organizer of the Workshop on Function Spaces and High-dimensional Approximation, Barcelona, Spain
- May 30- June 4, 2016: Main organizer of the Advanced course on Constructive Approximation and Harmonic Analysis, Barcelona, Spain
- June 6-10, 2016: Main organizer of the Conference on Harmonic Analysis and Approximation Theory (HAAT 2016), Barcelona, Spain
- Aug. 3-8, 2015: Co-organizer of the Session “Fourier analysis and approximation theory” at the 10th International ISAAC congress (International Society for Analysis, Applications and Computations), Macao, China
- Jun.28-Jul.3, 2015: Co-organizer of the Banff-CMO workshop “Applied Functional Analysis”, Oaxaca, Mexico
- Nov. 4-8, 2013: Main organizer of the “Joint CRM–ISAAC Conference on Fourier Analysis and Approximation Theory”, CRM, Barcelona, Spain
- Aug. 5-9, 2013: Main organizer of the Session “Approximation theory and Harmonic analysis” at the 9th International ISAAC congress (International Society for Analysis, Applications and Computations), Krakow, Poland
- 2011 - 2012: Main organizer of the Research program “Approximation Theory and Fourier Analysis” in the Centre de Recerca Matemàtica), September 2011-February 2012.
- Sep. 26-30, 2011: Main organizer of the International Conference on Function Spaces, Weights, and Variable Exponent Analysis
- Nov. 7-11, 2011: Main organizer of the Advanced Course on Approximation Theory
- Dec. 12-16, 2011: Main organizer of ICREA Conference on Approximation Theory and Fourier Analysis
- Aug. 22-27, 2011: Main organizer of the Session “Approximation theory and Fourier analysis” at the 8th International ISAAC congress (International Society for Analysis, Applications and Computations), Moscow, Russia

#### **PhD and Post-Doctoral students:**

- 2019-pres: Kristina Oganesyana (PhD),
- 2018-pres: Kelbet Sadykova (PhD),
- 2017-2019: Thaís Jordão (FAPESP Post-Doc),
- 2016-2018: Yerzhan Toleugazy (PhD) (Codirected with K. Bekmaganbetov), Date of defense: 14.12.2018, Al-Farabi Kazakh National University, Title: Embedding theorems of Nikolskii-Besov spaces and some problems of approximation theory in anisotropic spaces. Currently Associate Professor, Moscow State University, Astana Branch, Kazakhstan
- 2015-2018: Nestor Costa (PhD) (Codirected with J. Bruna), Date of defense: 20.06.2018, Universitat Autònoma de Barcelona, Title: Innovation in the design and fabrication of optical rotary sensors. Currently Application Solution Manager at Monocrom S.L.
- 2015-2018: Alberto Debernardi (PhD), Date of defense: 12.03.2018, Universitat Autònoma de Barcelona, Title: Convergence and integrability of Fourier transforms. Currently postdoc at Bar Ilan University, Israel
- 2015-2018: Askhat Mukanov (PhD), Date of defense: 14.03.2018, Universitat Autònoma de Barcelona, Title: Integrability of Fourier transforms, general monotonicity, and related problems. Currently Associate Professor, Moscow State University, Astana Branch, Kazakhstan
- 2013-2018: Ainur Jumabayeva (PhD), Date of defense: 15.03.2018, Universitat Autònoma de Barcelona, Title: Liouville-Weyl derivatives, best approximations, and moduli of smoothness. Currently Associate Professor, Eurasian National University, Kazakhstan
- 2012-2013: Petr Chunaev (PhD), Currently Associate Professor, National Research University ITMO, Saint Petersburg, Russia

- 2010-2012: Daulet Nurakhmetov (PhD), Date of defense: 09.11.2012. Currently Associate Professor, Kazakh Technical University, Kazakhstan (Codirected with B. Kanguzhin)
- 2012-2013: Ramazan Akgün (Tubitak Post-Doc), Currently Professor, Balikesir University, Turkey.
- 2010-2012: Andriy Bondarenko (Post-Doc Beatriu de Pinós), Currently Associate Professor, Norwegian University of Science and Technology, Norway.
- 2011-2012: Polina Glazyrina (CRM Post-Doc), Currently Department Chair, Associate Professor, Ural Federal University and Institute of Mathematics and Mechanics, Ural Branch of the Russian Academy of Sciences, Russia.

**Professional Service:**

- May-June, 2021: Member of scientific committee of the Focus Program on Data Science, Approximation Theory, and Harmonic Analysis (May 17 - June 11, 2021) in the Fields Institute for Research in Mathematical Sciences, Toronto, Canada
- 2011-pres: Coordinator of Approximation Theory Seminar in CRM
- 2010-pres: Member of International Society for Analysis, its Applications, and Computation
- 2017: Member of the Ph.D. Committee for Martin Krepela. Charles University, Czech Republic. Thesis: Integral and Supremal Operators on Weighted Function Spaces
- 2014: Member of the Ph.D. Committee for Diana Chigambayeva. University of Padova, Italy. Thesis: Interpolation properties of Morrey-type spaces and their applications
- 2014, 2015: Member of the committee for academic promotion, King Abdulaziz University, Saudi Arabia

**Awards, Fellowships, and Distinctions:**

- Jan 2021: Oberwolfach Research Fellowship, Germany
- Jan.-June 2019: Visiting Fellow, Pembroke College, Cambridge University, UK
- 2019: Simons Fellow, The Isaac Newton Institute for Mathematical Sciences, UK
- 2017: "Research in Teams" Program, Banff Station, Canada
- 2015: "Research in Pairs" Program, Mathematisches Forschungsinstitut Oberwolfach, Germany
- 2013: Humboldt Research Fellowship for Experienced Researchers (by the the Alexander von Humboldt Foundation),
- 2011: Selected as Number 1 in the area of Mathematics in the Ramón y Cajal programme of MCyT (the Spanish Ministry of Science and Technology),
- 2009: ISAAC Award 2009 (by the International Society for Analysis, its Applications, and Computation), for analysts of age below 40.
- 2009: "Research in Pairs" Program, Mathematisches Forschungsinstitut Oberwolfach, Germany
- 2008-2012 : ICREA Researcher
- 2006-2008: Post-doctoral Fellowship, Scuola Normale Superiore
- 2004-2006: Marie Curie Fellowship, Contract MIF1-CT-2004-509465, European Commission
- 1999: Graduated from Moscow State University with distinction

**Grants:**

- 2018-2020: MTM2017-87409-P "Teoría de Aproximación y Análisis Armónico: métodos y aplicaciones", Ministerio de Ciencia e Innovación Grant, Spain (Principal Investigator)
- 2017-2019: Grup de teoria de funcions de la UAB/UB, 2017 SGR 358. Grups de recerca (SGR-DGR), the Generalitat de Catalunya
- 2017: ISAAC grant supporting the organization of the Follow-up conference "Approximation Theory and Function Spaces" (Main Organizer)
- 2016: Clay Mathematics Institute grant, National Science Foundation grant (Constructive Approximation and Harmonic Analysis, Grant No. 1613790), Simons Foundation grant, and ISAAC grant supporting the organization of the research program in CRM (Main Organizer)
- 2015-2018: 2014 DI 038, "Innovació en el disseny i construcció de sensors rotatius òptics"
- 2015-2017: MTM2014-59174-P "Methods of constructive approximation and Fourier analysis", Ministerio de Ciencia e Innovación Grant, Spain (Principal Investigator)

- 2015-2017: "Optimal methods of digital signal compression and recovery", Grant of Ministry of Education and Science of the Republic of Kazakhstan
- 2014-2016: Grup de teoria de funcions de la UAB/UB, 2014-SGR-289. Grups de recerca (SGR-DGR), the Generalitat de Catalunya
- 2012-2013: MTM 2011-27637 "Análisis Armónico, Teoría de Aproximación y Problemas Extremales", Ministerio de Ciencia e Innovación Grant, Spain (Principal Investigator)
- 2011: ICREA Conference Award supporting the organization of the Conference "Approximation theory and Fourier analysis", ICREA (Main Organizer)
- 2011: ESF individual Grant within the framework of "Harmonic and Complex Analysis and its Applications", European Science Foundation
- 2010: Visiting Grant, Centro de Giorgi, Pisa, Italy
- 2009: 2009 SGR 1303, the Generalitat de Catalunya
- 2009: MTM 2008-05561-C02-02, Ministerio de Ciencia e Innovación Grant, Spain
- 2008: Visiting Grant, European Congress, Amsterdam, The Netherlands
- 2008: Visiting Grant, Fields Institute, Canada
- 2008: Russian Science Support Foundation Grant 08-01-00302
- 2008: Leading Scientific Schools Grant NSH-2787.2008.1
- 2007: Gelbart Institute Grant
- 2007: Cambridge Philosophical Society Grant
- 2006: Visiting Grant, University of Alberta, Edmonton, Canada
- 2006: Leading Scientific Schools Grant NSH-4681.2006.1
- 2006: RFFR Grant 06-01-00268
- 2004: Visiting Grant, University of Alberta, Edmonton, Canada
- 2004: Visiting Grant, Centro de Giorgi, Pisa, Italy
- 2004: Visiting Grant, University of Canterbury, Christchurch, New Zealand
- 2003: RFFR Grant 03-01-00080
- 2003: Leading Scientific Schools Grant NSH-1657.2003.1
- 2003: RFFR Individual Grant 03-01-06155 for young scientists
- 2003: Visiting Grant, Mathematical Institute, Jena, Germany
- 2003: Visiting Grant, McGill University, Montreal, Canada
- 2003: Visiting Grant, University of Alberta, Edmonton, Canada
- 2000-2002: RFFR Grant 00-01-00042
- 2000-2002: RFFR Grant 00-15-96143
- 2000: Visiting Grant, Lund University, Sweden

#### Conference Talks:

- 20/09/20-20/09/20: Russian-Kazakh mathematical symposium, online
- 16/01/20-18/01/20: MATA2020 – Multivariate Approximation: Theory and Applications, Perugia, Italy;
- 12/08/19-17/08/19: First Analysis Mathematica Conference, Budapest, Hungary;
- 06/08/18-11/08/18: St.Petersburg Summer Meeting in Mathematical Analysis, St. Petersburg, Russia;
- 08/07/18-13/07/18: Jaen Conference on Approximation Theory, Jaen, Spain;
- 17/09/17-23/09/17: New perspectives in the theory of function spaces and their applications, Bedlewo, Poland;
- 24/08/17-31/08/17: Workshop on Fourier Analysis and Related Fields, Pécs, Hungary;
- 08/05/17-11/05/17: International Conference in Approximation Theory, Georgia Southern University, USA;
- 06/05/17-07/05/17: AMS Sectional Meeting, Hunter College, City University of New York, New York, NY;
- 23/04/17-28/04/17: Modern Methods, Problems and Applications of Operator Theory and Harmonic Analysis, Rostov-on-Don, Russia;
- 02/05/16-06/05/16: Workshop on Function Spaces and High-dimensional Approximation, Barcelona;
- 02/07/15-04/07/15: Conference in Analysis in Honor of Yoram Sagher, Florida Atlantic University, USA;
- 29/06/15-03/07/15: CMO-BIRS 2015, Applied Functional Analysis, Oaxaca, Mexico;
- 27/04/15-30/04/15: Workshop on Function Spaces, Harmonic Analysis, and Related Topics, Karlstad University, Spain;
- 11/12/14-13/12/14: Functional Analysis Meeting dedicated to Richard Aron, University of Valencia, Spain;
- 21/10/14-22/10/14: Workshop on Harmonic Analysis and related topics, University of Ulm, Germany;

14/10/14-18/10/14: Workshop on Real Analysis, The Hausdorff Research Institute for Mathematics, Germany;  
 23/06/14-27/06/14: Mini-courses in Mathematical Analysis 2014, University of Padova, Italy;  
 29/10/13-01/11/13: Conference on Nonlinear Approximations and Applications, Steklov Mathematical Institute, Moscow, Russia;  
 05/08/13-09/08/13: Approximation theory and Harmonic analysis, 9th International ISAAC congress, Krakow, Poland;  
 30/07/13-30/07/13: Radial Basis Functions Day, Justus-Liebig-Universität Giessen, Germany;  
 30/05/13-01/06/13: Balkan conference of mathematical sciences, Elbasan, Albania;  
 19/05/13-24/05/13: Integral Transforms and Spectral Theory in Analysis and Geometry, Complex Analysis and Dynamical Systems, Naharia, Israel;  
 02/09/12-08/09/12: Analyse Harmonique et Probabilités, Angers, France;  
 02/07/12-03/07/12: Approximation Days 2012, Leuven, Belgium;  
 25/06/12-30/06/12: Fourier Analysis and Pseudo-Differential Operators, Helsinki, Finland;  
 11/06/12-15/06/12: Harmonic Analysis and Partial Differential Equations, El Escorial, Madrid, Spain;  
 04/01/12-07/01/12: New Trends in Approximation Theory, Ein-Gedi, Israel;  
 26/09/11-30/09/11: Function Spaces, Weights, and Variable Exponent Analysis, Barcelona, Spain;  
 22/08/11-27/08/11: ISAAC congress, Peoples' Friendship University, Moscow, Russia;  
 23/08/10-26/08/10: Conference on Approximation Theory, Steklov Mathematical Institute, Moscow, Russia;  
 28/06/10-02/07/10: The Józef Marcinkiewicz Centenary Conference, Poznań, Poland;  
 21/06/10-25/06/10: Summer school/ Workshop "Harmonic Analysis and Related Topics", IST, Lisbon, Portugal;  
 13/05/10-14/05/10: Conference "Mathematical analysis", Alicante, Spain;  
 15/04/10-30/04/10: Intensive Research Program "Euclidean Harmonic Analysis, Nilpotent Lie Groups and PDEs", The Centro di Ricerca Matematica Ennio De Giorgi, Pisa, Italy;  
 27/01/10-02/02/10: Conference "Theory of functions and Applications", Saratov, Russia;  
 24/09/09-30/09/09: Functional Analysis and Approximation Theory, Acquafredda di Maratea, Italy;  
 22/08/09-26/08/09: Functional Methods in Approximation Theory and Operator Theory, Volyn, Ukraine;  
 13/07/09-17/07/09: ISAAC Congress, London, UK;  
 27/06/09-01/07/09: Conference "International Meeting on Approximation of the University of Jaén", Úbeda, Spain;  
 29/03/09-02/04/09: Conference "Modern problems of mathematics, mechanics and their applications", Moscow, Russia;  
 21/03/09-24/03/09: Conference "Approximation Theory and Signal Analysis", Lindau, Germany;  
 21/11/08-22/11/08: Auburn miniconference on Harmonic Analysis and Related Areas, Auburn, AL, USA;  
 02/08/08-06/08/08: Conference on Function Theory, Miass, Russia;  
 06/07/08-11/07/08: Conference on Approximation Theory, Budapest, Hungary;  
 29/01/08-04/02/08: Conference "Theory of functions and Applications", Saratov, Russia;  
 07/11/07-12/11/07: Conference "VIII International Meeting on Approximation of the University of Jaén", Úbeda, Spain;  
 01/08/07-10/08/07: Function Theory, Stechkin's Conference, Aleksin, Russia;  
 04/09/06-08/09/06: Barcelona Analysis Conference, Spain;  
 31/08/06-03/09/06: Conference "VII International Meeting on Approximation of the University of Jaén", Úbeda, Spain;  
 30/08/06-01/09/06: Conference "New Trends in Constructive Approximation Theory", U. Carlos III de Madrid, Spain;  
 22/08/06-30/08/06: ICM 2006, Madrid, Spain;  
 19/06/06-23/06/06: Harmonic Analysis and Related Problems (HARP 2006), Zaros, Crete, Greece;  
 02/03/06-05/03/06: South Eastern Analysis Meeting (SEAM XXII), University of Florida, Gainesville, FL, USA;  
 20/09/05-27/09/05: Conference "Harmonic analysis and approximations, III", Tsahkadzor, Armenia;  
 09/09/05-11/09/05: Conference "Mathematical analysis and applications", Albarracin (Teruel), Spain;  
 08/06/05-14/06/05: Fejér-Riesz conference, János Bolyai Mathematical Society, Eger, Hungary;  
 20/09/04-24/09/04: Conference "The Second international course of mathematical analysis in Andalucía", Granada, Spain;  
 27/01/04-01/02/04: Conference "Modern problems of theory of functions and their applications" (The 12-th Winter School in Saratov), Saratov, Russia;

- 24/03/03-26/03/03: II International Conference "Function Spaces, Differential operators and Problems of mathematical education" in Honour of Lev D. Kudrjavcev on his 80th Birthday, Moscow, Russia;
- 26/01/03-04/02/03: Conference "Modern methods of theory of functions and adjacent problems" (The Winter School in Voronezh), Voronezh, Russia;
- 24/06/02-27/06/02: International Workshop on Orthogonal Polynomials: "Orthogonal Polynomials and Approximation Theory", Universidad Carlos III de Madrid, Leganes, Spain;
- 08/04/02-13/04/02: Conference "The XXIV Conference of Young Scientists", Moscow State University, Russia;
- 28/01/02-04/02/02: Conference "Modern problems of theory of functions and their applications" (The 11-th Winter School in Saratov), Saratov, Russia;
- 27/01/01-04/02/01: Conference "Modern methods of theory of functions and adjacent problems" (The Winter School in Voronezh), Voronezh, Russia;
- 17/08/00-22/08/00: Conference on Function Spaces, Interpolation Theory and related topics in honour of Jaak Peetre on his 65th birthday, Lund, Sweden;
- 09/04/99-14/04/99: Conference "The XXI Conference of Young Scientists", Moscow State University, Russia.

### Seminar and Colloquium Talks:

- 12/20: Approximation Theory, Harmonic Analysis and related topics, Online.
- 04/20: Analysis Seminar, UB, UAB, CRM, Barcelona.
- 12/19 (2): Analysis Seminar, Beijing Normal University, China.
- 11/19: Kashin/Konyagin analysis Seminar, Moscow State University, Moscow, Russia.
- 11/19: Besov/Nikolskii Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 12/18: The Prague seminar on function spaces, Charles University, Prague, Czech Republic.
- 04/18: Colloquium, Pontificia Universidad Católica del Perú, Peru.
- 02/18: Colloquium, Universidad Complutense de Madrid, Spain.
- 11/17: PIMS/AMI Seminar, University of Alberta, Edmonton, Canada.
- 11/17: Approximation Theory Seminar, University of Alberta, Edmonton, Canada.
- 05/17: General Seminar, USC, Interdisciplinary Mathematics Institute, SC, USA.
- 04/17: Analysis Seminar, Aristotle University of Thessaloniki, Thessaloniki, Greece.
- 04/17: Approximation Theory Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 04/17: Analysis Seminar, University of Coimbra, Portugal.
- 10/16: Functional Analysis Seminar, Université de Franche-Comté, Besançon, France.
- 10/16: Colloquium, Delft University of Technology, The Netherlands.
- 04/16: Colloquium, Nepal Mathematical Society.
- 03/16: Mathematics of Computation, Hausdorff Center for Mathematics, Germany.
- 03/16: Approximation Theory Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 02/16: Colloquium, Universit degli Studi di Perugia, Spain.
- 12/15: Seminar "Function spaces", Mathematical Institute, Jena, Germany.
- 11/15: Colloquium, Delft University of Technology, The Netherlands.
- 10/15: Seminar "Function spaces", Mathematical Institute, Jena, Germany.
- 10/15: Colloquium, Universität Trier, Germany.
- 07/15: Colloquium, Florida International University, USA.
- 05/15: GAMA Seminar, Universidad Carlos III de Madrid.
- 03/15: Barcelona's Joint Analysis Seminar, Barcelona.
- 11/14: Colloquium, Universität zu Lübeck, Germany.
- 10/14: Approximation Theory Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 10/14: Besov/Nikolskii Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 03/14: Institute Seminar, Gumilyov Eurasian National University, Astana, Kazakhstan.
- 12/13: Analysis Seminar, Delft University of Technology, The Netherlands.
- 11/13: Seminar "Function spaces", Mathematical Institute, Jena, Germany.
- 10/13: Colloquium, Universität Trier, Germany.
- 05/13: Istanbul Analysis Seminar, Turkey.
- 03/13: Colloquium, CRM, Barcelona.
- 02/13: Institute Seminar, Gumilyov Eurasian National University, Astana, Kazakhstan.
- 11/12: Colloquium, Universität Stuttgart, Germany.

- 05/12: Barcelona's Joint Analysis Seminar, Barcelona.
- 04/12: Analysis Seminar, Gumilyov Eurasian National University, Astana, Kazakhstan.
- 04/12: Colloquium, Mathematisches Institut, Justus-Liebig-Universität Giessen, Germany.
- 03/11: Besov/Nikolskii Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 03/11: Approximation Theory Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 11/10: Colloquium, Delft University of Technology, The Netherlands.
- 10/10; 11/10: Analysis Seminar, Gumilyov Eurasian National University, Astana, Kazakhstan.
- 10/10: Institute Seminar, Institute of Mathematics, Almaty, Kazakhstan.
- 10/10: Seminar, Kazakh National University Al-Farabi, Almaty, Kazakhstan.
- 04/10: Analysis Seminar, Universidad de La Laguna, Spain.
- 03/10: Barcelona's Joint Analysis Seminar, Barcelona.
- 11/09: Functional Analysis Seminar, Université de Lille 1, France.
- 10/09: Analysis Seminar, University of Hohenheim, Stuttgart, Germany.
- 04/09: Analysis Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 04/09: Besov/Nikolskii Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 01/09: Barcelona's Joint Analysis Seminar, UB, UAB, CRM, Barcelona, Spain.
- 12/08: Analysis seminar, Georgia Institute of Technology, GA, USA.
- 11/08: Seminar Sophus Lie, Technische Universität Darmstadt, Germany.
- 12/07 (2): Analysis seminar, Bar-Ilan University, Israel.
- 12/07: Colloquium, Holon Institute of Technology, Israel.
- 12/07: Approximation Theory Seminar, Tel Aviv University, Israel.
- 05/07: Analysis seminar, University of Milano - Bicocca, Italy.
- 05/07: "János Bolyai" international seminar, University of Basilicata, Italy.
- 02/07: Colloquium, Cardiff University, UK.
- 02/07: Seminar, Isaac Newton Institute, Cambridge, UK.
- 02/07: Analysis Seminar, Imperial College, London, UK.
- 01/07: Harmonic Analysis Seminar, Scuola Normale Superiore, Pisa, Italy.
- 12/06: Besov/Nikolskii Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 11/06: Functional Analysis Seminar, University of Alberta, Edmonton, Canada.
- 10/06: Séminaire d'Analyse Harmonique, Université de Paris-Sud, Paris, France.
- 05/06: Barcelona's Joint Analysis Seminar, UB, UAB, CRM, Barcelona, Spain.
- 03/06: Analysis seminar, Princeton University, NJ, USA.
- 03/06: Analysis seminar, University of Wisconsin-Madison, WI, USA.
- 03/06: Analysis seminar, DePaul University, IL, USA.
- 09/05: Seminar "Trigonometric and Orthogonal series", Moscow State University, Moscow, Russia.
- 05/05: Seminario de Analisis, Universidad Autónoma de Madrid, Madrid, Spain.
- 04/05: Besov/Nikolskii Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 04/05: Telyakovskii Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 01/05: Barcelona's Joint Analysis Seminar, Barcelona.
- 11/04: Approximation Theory Seminar, University of Alberta, Edmonton, Alberta, Canada.
- 05/04: Workshop of the Department of Theory of Function, Kiev Mathematical Institute, Ukraine.
- 03/04: Telyakovskii Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 02/04: Research Seminar, University of Canterbury, Christchurch, New Zealand.
- 12/03: Seminar "Trigonometric and Orthogonal series", Moscow State University, Moscow, Russia.
- 11/03: Seminar "Function spaces", Mathematical Institute, Jena, Germany.
- 10/03: Analysis Seminar, Université Laval, Quebec City, Quebec, Canada.
- 10/03: Analysis Seminar, McGill University, Montreal, Quebec, Canada.
- 09/03: Approximation Theory Seminar, University of Alberta, Edmonton, Alberta, Canada.
- 02/03: Besov/Nikolskii Seminar, Steklov Mathematical Institute, Moscow, Russia.
- 09/02; 10/02: Seminar "Trigonometric and Orthogonal series", Moscow State University, Moscow, Russia.
- 10/02: Approximation Theory Seminar, Moscow State University, Moscow, Russia.
- 04/02: Analysis Seminar, Moscow State University, Moscow, Russia.
- 11/01: Approximation Theory Seminar, Moscow State University, Moscow, Russia.
- 02/00: Seminar "Trigonometric and Orthogonal series", Moscow State University, Moscow, Russia.



04/99: Analysis Seminar, Moscow State University, Moscow, Russia.

**Accreditations:**

2011: Accreditation in Research, Catalan University Quality Assurance Agency (AQU Catalunya), Barcelona, Spain

**Teaching (recent):**

Sep-Oct 2019: PhD course “Advanced Course on Constructive Approximation and Harmonic Analysis”, CRM.

Dec 2019: Short Course (4 lectures) “Topics on Approximation Theory”, Shanghai Jiao Tong University, China.

**Books Edited:**

- (1) M. Abell, E. Iacob, A. Stokolos, S. Taylor, S. Tikhonov, J. Zhu (Eds.) Topics in Classical and Modern Analysis. Applied and Numerical Harmonic Analysis. Birkhäuser (2019). 373pp.
- (2) D. Dũng, V. Temlyakov, T. Ullrich, S. Tikhonov (Ed.) Hyperbolic Cross Approximation. Advanced Courses in Mathematics CRM Barcelona. Basel: Birkhäuser/Springer (2018). 218pp.
- (3) M. Ruzhansky, S. Tikhonov (Eds.) Methods of Fourier Analysis and Approximation Theory, Applied and Numerical Harmonic Analysis, Birkhäuser (2016). 226pp.
- (4) F. Dai, Y. Xu, S. Tikhonov (Ed.) Analysis on h-harmonics and Dunkl transforms. Advanced Courses in Mathematics CRM Barcelona. Basel: Birkhäuser/Springer (2015).
- (5) V. Temlyakov, S. Tikhonov (Ed.) Sparse approximation with bases. Advanced Courses in Mathematics CRM Barcelona. Basel: Birkhäuser/Springer (2015).
- (6) D. Cruz-Uribe, A. Fiorenza, M.V. Ruzhansky, J. Wirth, S. Tikhonov (Ed.) Variable Lebesgue Spaces and Hyperbolic Systems, Advanced Courses in Mathematics CRM Barcelona. Basel: Birkhäuser/Springer (2014).

**Publication List:**

Book:

- (1) M. K. Potapov, B. V. Simonov, S. Tikhonov. Fractional Moduli of Smoothness, Maks Press, Moscow (2016). 338pp.

Recent preprints:

- (2) F. Dai, D. Gorbachev, S. Tikhonov. “Estimates of the asymptotic Nikolskii constants for spherical polynomials”, ArXiv:1907.03832
- (3) F. Dai, A. Prymak, A. Shadrin, V. Temlyakov, S. Tikhonov. “Entropy numbers and Marcinkiewicz-type discretization theorem”, ArXiv:2001.10636

Accepted:

- (4) F. Dai, A. Prymak, A. Shadrin, V. Temlyakov, S. Tikhonov. “Sampling discretization of integral norms”, To appear in Constr. Approx. ArXiv:2001.09320
- (5) O. Domínguez, S. Tikhonov. “Function spaces of logarithmic smoothness: embeddings and characterizations”, To appear in Memoirs Amer. Math. Soc. 162 pages. Arxiv: 1811.06399
- (6) V. Ivanov, D. Gorbachev, S. Tikhonov. “Riesz potential and maximal function for Dunkl transform”, To appear in Potential Analysis. ArXiv:1708.09733
- (7) Yu. Kolomoitsev, S. Tikhonov. “Hardy-Littlewood and Ulyanov inequalities”, To appear in Memoirs Amer. Math. Soc. 114 pages. Arxiv: 1711.08163
- (8) S. Tikhonov. “Weighted Fourier inequalities and boundedness of variations”, To appear in Proc. Steklov Inst. Math.

2020:

- (9) F. Dai, D. Gorbachev, S. Tikhonov. “Nikolskii constants for polynomials on the unit sphere”, *J. d’Analyse Math.* Vol. 140 (2020), 161–185.
- (10) F. Dai, D. Gorbachev, S. Tikhonov. “Nikolskii inequality for lacunary spherical polynomials”, *Proc. AMS.* Vol. 148 (3) (2020), 1169–1174. Arxiv: 1905.00323
- (11) O. Domínguez, D. Haroske, S. Tikhonov. “Embeddings and characterizations of Lipschitz spaces”, *J. Math. Pures Appl.* Vol. 144 (2020), 69–105. Arxiv: 1911.08369
- (12) L. De Carli, D. Gorbachev, S. Tikhonov. “Weighted gradient inequalities and unique continuation problems”, *Calculus of Variations and PDE’s*, 59, (2020), 89. ArXiv:1804.03712
- (13) M. Dyachenko, A. Mukanov, S. Tikhonov. “Hardy-Littlewood theorems for trigonometric series with general monotone coefficients”, *Studia Math.* Vol. 250 (3) (2020), 217–234.
- (14) V. Ivanov, D. Gorbachev, S. Tikhonov. “Uncertainty principles for eventually constant sign bandlimited functions”, *SIAM J. Math. Anal.*, 52(5), 4751–4782. ArXiv: 1904.11328
- (15) V. Ivanov, D. Gorbachev, S. Tikhonov. “Sharp approximation theorems and Fourier inequalities in the Dunkl setting”, *J. Approx. Theory* 258 (2020), 105462. ArXiv: 1912.03743
- (16) Yu. Kolomoitsev, S. Tikhonov. “Smoothness of functions vs. smoothness of approximation processes”, *Bull. Math. Sci.* Vol. 10, No. 3 (2020), Article 2030002. Arxiv: 1903.00229
- (17) Yu. Kolomoitsev, S. Tikhonov. “Properties of moduli of smoothness in  $L_p(\mathbb{R}^d)$ ”, *J. Approx. Theory*, Vol. 257 (2020), Article 105423. Arxiv: 1907.12788
- (18) E. Nursultanov, S. Tikhonov. “Wiener–Beurling spaces and their properties”, *Bull. Sci. Math.*, Vol. 159 (2020), 102825.
- (19) E. Nursultanov, S. Tikhonov. “Weighted Fourier inequalities in Lebesgue and Lorentz spaces”, *Journal of Fourier Analysis and Applications*, 26 (2020), 57.
- (20) S. Tikhonov, P. Yuditskii. “Sharp Remez inequality”, *Constr. Approx.* 52 (2020), no. 2, 233–246.

2019:

- (21) F. Dai, A. Prymak, V. N. Temlyakov, S. Tikhonov. “Integral norm discretization and related problems”, *Russ. Math. Surv.*, Vol. 74:4 (2019), 579–630. Translation from *Uspekhi Mat. Nauk*, Vol. 74, Is. 4(448) (2019), 3–58.
- (22) M. Dyachenko, A. Mukanov, S. Tikhonov. “Uniform convergence of trigonometric series with general monotone coefficients”, *Canad. Jour. Math.* 71, 6, (2019), 1445–1463.
- (23) M. Dyachenko, A. Mukanov, S. Tikhonov. “Smoothness of functions and Fourier coefficients”, *Sbornik: Mathematics* (2019), 210 (7), 994–1018. Translation from *Mat. Sb.*, Vol. 210, Is 7 (2019), 94–119.
- (24) D. Gorbachev, V. Ivanov, S. Tikhonov. “Positive  $L^p$ -bounded Dunkl-type generalized translation operator and its applications”, *Constr. Approx.*, Vol. 49, Is 3 (2019), 555–605.
- (25) D. Gorbachev, S. Tikhonov. “Doubling condition at the origin for non-negative positive definite functions”, *Proc. AMS*, Vol. 147, Is 2 (2019), 609–618.

2018:

- (26) D. Gorbachev, S. Tikhonov. “Wiener’s problem for positive definite functions”, *Math. Zeit.*, Vol. 289, Is 3-4 (2018), 859–874.
- (27) D. Gorbachev, E. Liflyand, S. Tikhonov. “Weighted norm inequalities for integral transforms”, *Indiana Univ. Math. J.*, Vol. 67, No. 5 (2018), 1949–2003.
- (28) M. Dyachenko, E. Nursultanov, S. Tikhonov. “Hardy–Littlewood and Pitt’s inequalities for Hausdorff operators”, *Bull. Sci. Math.*, 147 (2018), 40–57.
- (29) M. Dyachenko, E. Nursultanov, S. Tikhonov. “Hardy–type theorems on Fourier transforms revised”, *J. Math. Anal. Appl.*, 467 (2018), 171–184.

(30) M. Dyachenko, S. Tikhonov. “Smoothness and asymptotic properties of functions with general monotone Fourier coefficients, *J. Fourier Anal. Appl.*, 24(4) (2018), 1072–1097.

(31) E. Nursultanov, S. Tikhonov, N. Tleukhanova. “Norm convolution inequalities in Lebesgue spaces”, *Revista Matem. Iberoam.* Vol. 34, Is 2 (2018), 811–838.

2017:

(32) A. Bondarenko, S. Tikhonov. “Bernstein inequalities with nondoubling weights”, *J. Eur. Math. Soc.*, Vol. 19, Is 1 (2017), 67–106. arXiv:1308.5818

(33) L. De Carli, D. Gorbachev, S. Tikhonov. “Pitt inequalities and restriction theorems for the Fourier transform”, *Rev. Mat. Iberoam.* 33, no. 3 (2017), 789–808. arXiv:1509.01210

(34) M. Ganzburg, S. Tikhonov. “On sharp constants in Bernstein-Nikolskii inequalities”, *Constr. Approx.*, Vol. 45, Is 3 (2017), 449–466.

(35) V. Temlyakov, S. Tikhonov. “Remez-type and Nikolskii-type inequalities: general relations and the hyperbolic cross polynomials”, *Constr. Approx.*, Vol. 46, Is 3 (2017), 593–615.

2016:

(36) F. Dai, H. Feng, S. Tikhonov. “Reverse Hölder’s inequality for spherical harmonics”, *Proc. Amer. Math. Soc.*, Vol. 144 (2016), 3, 1041–1051. arXiv:1408.1877

(37) F. Dai, S. Tikhonov. “Weighted fractional Bernstein’s inequalities and their applications”, *J. d’Analyse Math.*, Vol. 129 (2016), 1, 33–68. arXiv:1307.0207

(38) D. Gorbachev, V. Ivanov, S. Tikhonov. “Pitt’s inequalities and uncertainty principle for generalized Fourier transform”, *International Mathematics Research Notices*, Vol. 23 (2016), 7179–7200. ArXiv:1507.06445

(39) D. Gorbachev, V. Ivanov, S. Tikhonov. “Sharp Pitt inequality and logarithmic uncertainty principle for Dunkl transform in  $L^2$ ”, *J. Approx. Theory*, Vol. 202 (2016), 109–118. arXiv:1505.02958

(40) E. Nursultanov, M. Ruzhansky, S. Tikhonov. “Nikolskii inequality and Besov, Triebel-Lizorkin, Wiener and Beurling spaces on compact homogeneous manifolds”, *Annali della Scuola Normale Superiore di Pisa, Classe di Scienze(5)* Vol. XVI (2016), 981–1017. (arXiv:1403.3430)

(41) M. Ruzhansky, S. Tikhonov. “Methods of Fourier analysis and approximation theory”, in *Applied and Numerical Harmonic Analysis*, Birkhäuser (2016), 1–18.

2015:

(42) P. Glazyrina, S. Tikhonov. “Jacobi weights, fractional integration, and sharp Ulyanov inequalities”, *J. Approx. Theory*, Vol. 195, (2015), 122–140.

(43) E. Nursultanov, M. Ruzhansky, S. Tikhonov. “Nikolskii inequality and functional classes on compact Lie groups”, *Functional Analysis and Its Applications*, Vol.49, N 3 (2015), 226–229. (arXiv:1507.07111)

(44) E. Nursultanov, S. Tikhonov. “Weighted norm inequalities for Riesz potential in the Lorentz spaces”, *Potent. Analysis.*, 42, 2 (2015), 435–456. (arXiv:1307.0206)

2014:

(45) A. Gogatishvili, B. Opic, S. Tikhonov, W. Trebels. “Ulyanov-type inequalities between Lorentz-Zygmund spaces”, *J. Fourier Anal. Appl.* 20, 5 (2014), 1020–1049.

(46) A. Kolesnikov, S. Tikhonov. “Regularity of the Monge-Ampère equation in Besov’s spaces”, *Calculus of Variations and PDE’s*, 49, (2014), 1187–1197.

(47) S. Tikhonov, M. Zeltser, “Weak monotonicity concept and its applications”, *Fourier Analysis, Trends in Mathematics 2014*, 357–374.

2013:

(48) L. De Carli, D. Gorbachev, S. Tikhonov. “Pitt and Boas inequalities for Fourier and Hankel transforms”, *J. Math. Anal. Appl.*, 408, 2 (2013), 762–774.

(49) M. Dyachenko, E. Nursultanov, S. Tikhonov. “Global and local smoothness of the Hilbert transforms”, *Proc. Steklov Inst. Math.*, 280, 1 (2013), 169–180.

(50) E. Nursultanov, S. Tikhonov. “A sharp Remez inequality for trigonometric polynomials”, *Constructive Approx.*, 38 (1) (2013), 101–132.

(51) M. K. Potapov, B. V. Simonov, S. Tikhonov. “Mixed moduli of smoothness in  $L_p$ ,  $1 < p < \infty$ : A survey”, *Surveys in Approximation Theory*, 8 (2013), 1–57.

2012:

(52) D. Gorbachev, S. Tikhonov. “Moduli of smoothness and growth properties of Fourier transforms: two-sided estimates”, *Journal of Approx. Theory*, Vol. 164, Is. 9 (2012), 1283–1312.

(53) E. Lifyand, S. Tikhonov. “Two-sided weighted Fourier inequalities”. *Annali della Scuola Normale Superiore. Classe di Scienze.* (5) Vol. XI (2012), 341–362.

(54) H. Mhaskar, S. Tikhonov. “Wiener type theorems for Jacobi series with nonnegative coefficients”. *Proc. Amer. Math. Soc.* 140 (2012), 977–986.

2011:

(55) D. Gorbachev, E. Lifyand, S. Tikhonov. “Weighted Fourier Inequalities: Boas conjecture in  $\mathbb{R}^n$ ”, *J. d’Analyse Math.*, Vol. 114 (2011), 99–120.

(56) E. Lifyand, S. Tikhonov. “A concept of general monotonicity and applications”, *Math. Nachr.*, Vol. 284, No. 8–9 (2011), 1083–1098.

(57) E. Lifyand, S. Tikhonov, M. Zeltser. “Extending tests for convergence of number series”, *Jour. Math. Anal. Appl.* Vol. 377, 1 (2011), 194–206.

(58) E. Nursultanov, S. Tikhonov. “Convolution inequalities in Lorentz spaces”, *J. Fourier Anal. Appl.*, Vol. 17 (2011), 486–505.

(59) E. Nursultanov, S. Tikhonov. “Net spaces and boundedness of integral operators”, *J. of Geometric Analysis*, Vol. 21, 4 (2011), 950–981.

(60) V. Stepanov, S. Tikhonov. “Two power-weight inequalities for the Hilbert transform on the cones of monotone functions”, *Complex Variables and Elliptic Equations*, Vol. 56, 10–11 (2011), 1039–1047.

(61) S. Tikhonov, W. Trebels. “Ulyanov inequalities and generalized Liouville derivatives”, *Proc. Roy. Soc. Edinburgh Sect. A*, Vol. 141, 1 (2011), 205–224.

2010:

(62) M. Ash, S. Tikhonov, J. Tung. “Wiener’s positive Fourier coefficients theorem in variants of  $L^p$  spaces”, *Michigan Math. J.*, Vol. 59, 1 (2010), 143–152.

(63) M. Dyachenko, E. Lifyand, S. Tikhonov. “Uniform convergence and integrability of Fourier integrals”, *Jour. Math. Anal. Appl.*, 372, 328–338, 2010.

(64) E. Lifyand, S. Tikhonov. “Weighted Paley-Wiener theorem on the Hilbert transform”, *C. R. Acad. Sci. Paris, Ser. I* 348, 1253–1258, 2010.

(65) M.K. Potapov, B.V. Simonov, S. Tikhonov. “Relations between the mixed moduli of smoothness and embedding theorems for Nikolskii classes”, *Proceedings of the Steklov Institute of Mathematics*, Vol. 269, 197–207, 2010; translation from Russian: *Trudy Matem. Inst. V. A. Steklova*, Vol. 269, 204–214, 2010.

(66) B. Simonov, S. Tikhonov. “Sharp Ul’yanov-type inequalities using fractional smoothness”, *Journal of Approx. Theory*, Vol. 162, Is. 9 (2010), 1654–1684.

(67) S. Tikhonov. “Weak Type Inequalities for Moduli of Smoothness: The Case of Limit Value Parameters”, *J. Fourier Anal. Appl.*, Vol. 16, Is. 4 (2010), 590–608.

2009:

(68) M. Dyachenko, S. Tikhonov. “Integrability and continuity of functions represented by trigonometric series: coefficients criteria”. *Studia Math.* 193, No. 3, 285–306, 2009.

(69) E. Lifyand, S. Tikhonov. “The Fourier transforms of general monotone functions” *Analysis and Mathematical Physics. Trends in Mathematics*, Birkhäuser Verlag, 377–396, 2009.

(70) E. Nursultanov, S. Tikhonov, N. Tleukhanova “Norm inequalities for convolution operators”, *C. R. Acad. Sci. Paris, Ser. I* 347, 1385–1388, 2009.

- (71) M.K. Potapov, B.V. Simonov, S. Tikhonov. "Relations between moduli of smoothness in different metrics" *Mosc. Univ. Math. Bull.*, 64, 3, 105–112, 2009; translated for Russian: *Vestnik Mosk. Univ., Ser. I*, 64, 3, 17–25, 2009.
- (72) M.K. Potapov, B.V. Simonov, S. Tikhonov. "Relations for moduli of smoothness in various metrics: functions with restrictions on the Fourier coefficients". *J. Jour. Approx.*, 1 (2) (2009), 205–222.

2008:

- (73) F. Dai, Z. Ditzian, S. Tikhonov. "Sharp Jackson inequality" *Journal of Approx. Theory*, 151, 1, 86–112, 2008.
- (74) M. Dyachenko, S. Tikhonov. "A Hardy-Littlewood theorem for multiple series" *Jour. Math. Anal. Appl.*, 339, 503–510, 2008.
- (75) M. Dyachenko, S. Tikhonov. "General monotone sequences and convergence of trigonometric series". *Topics in classical analysis and applications in honor of Daniel Waterman*. World Scientific, 88–101, 2008.
- (76) E. Lifyand, S. Tikhonov. "Extended solution of Boas' conjecture on Fourier transforms". *C. R. Acad. Sci. Paris*, Vol. 346, Is. 21-22, 1137–1142, 2008.
- (77) M.K. Potapov, B.V. Simonov, S. Tikhonov. "An inequality of Ul'yanov" *Mosc. Univ. Math. Bull.*, 63, 3, 115–118, 2008; translated for Russian: *Vestnik Mosk. Univ., Ser. I*, 63, 3, 33–36, 2008.
- (78) B. Simonov, S. Tikhonov. "Norm inequalities in multidimensional Lorentz spaces". *Mathematica Scandinavica*, 103, 278-294, 2008.
- (79) B. Simonov, S. Tikhonov. "Embedding theorems in constructive approximation" *Sbornik: Mathematics*, 199 (9), 1365-1405, 2008.
- (80) S. Tikhonov. "Best approximation and moduli of smoothness: computation and equivalence theorems" *Journal of Approx. Theory*, 153, 19–39, 2008.
- (81) S. Tikhonov. "On  $L_1$ -convergence of Fourier series" *Jour. Math. Anal. Appl.*, Vol. 347, 2, 416–427, 2008.
- (82) S. Tikhonov. "Addendum to "Trigonometric series of Nikol'skii classes" *Acta Math. Hungar.*, 120 (1–2), 9–20, 2008.

2007:

- (83) Z. Ditzian, S. Tikhonov. "Moduli of smoothness of functions and their derivatives" *Studia Math.*, 180, No. 2, 143–160, 2007.
- (84) M. Dyachenko, S. Tikhonov. "Convergence of trigonometric series with general monotone coefficients" *C. R. Acad. Sci. Paris*, Vol. 345, Is. 3, 1, 123–126, 2007.
- (85) S. Tikhonov. "Trigonometric series with general monotone coefficients" *Jour. Math. Anal. Appl.*, Vol. 326, 1, 721–735, 2007.
- (86) S. Tikhonov. "Trigonometric series of Nikol'skii classes" *Acta Math. Hungar.*, Vol. 114, No 1-2, 61–78, 2007.
- (87) S. Tikhonov. "On uniform convergence of trigonometric series" *Mat. Zametki*, Vol. 81, N 2, 304-310, 2007, translation in *Math. Notes*. Vol. 81, N 2, 268–274, 2007.
- (88) S. Tikhonov. "Smoothness conditions and Fourier series" *Math. Ineq. Appl.*, Vol. 10, N 2, 229–242, 2007.

2006:

- (89) B. Simonov, S. Tikhonov. "On embeddings of functional classes defined by constructive characteristics" *Banach Center Publications*, V. 72, 285–307, 2006.
- (90) S. Tikhonov. "Embedding results in the questions of strong approximation by Fourier series" *Acta Sci. Math*, V. 72, 117–128, 2006.
- (91) S. Tikhonov. "Convergence of trigonometric series" *Abstracts of ICM2006*, Madrid, Spain; 344–345, 2006.

2005:

- (92) Z. Ditzian, S. Tikhonov. "Ul'yanov and Nikol'skii-type inequalities" *Journal of Approx. Theory*, V. 133, 1, 100-133, 2005.

- (93) M.K. Potapov, B.V. Simonov, S. Tikhonov. "Transformation of Fourier series of functions by means power and slowly oscillating" *Mat. Zametki*, 77, 1, 99–116, 2005, translation in *Math. Notes*, 77, 1, 90–107, 2005.
- (94) S. Tikhonov. "On modulus of smoothness of fractional order " *Real. Analysis Exchange*, Vol. 30, No 2 (2004/2005), 507–518.
- (95) S. Tikhonov. "Characteristics of Besov-Nikol'skii class functions" *Electronic Transactions on Numerical Analysis*, V. 19, 94-104, 2005.
- (96) S. Tikhonov. "On two theorems of Lorentz" *Izv. Ross. Akad. Nauk, Ser. Mat.* Vol. 69, N 1, 165–178, 2005, translation in *Russian Acad. Sci. Izv. Math*, Vol. 69, N 1, 163–175, 2005.
- (97) S. Tikhonov. "On integration of trigonometric series" *Math. Notes*, 78, 3-4, 437–442, 2005.
- (98) S. Tikhonov. "Strong approximation of Fourier series and embedding theorems" *Analysis Mathematica*, V. 31, 183-194 , 2005.
- (99) S. Tikhonov. "On the equivalence of some conditions for convex functions" *Ukr. Math. J.*, V 57, N 3, 517-522, 2005.

2004:

- (100) Z. Ditzian, S. Tikhonov. "Note on order of approximation by Steklov means" *Mosc. Univ. Math. Bull.*, 59, 3, 47-48, 2004 2004.
- (101) M.K. Potapov, B.V. Simonov, S. Tikhonov. "Embedding theorems for Besov-Nikolskii and Weyl-Nikolskii classes in a mixed metric" *Mosc. Univ. Math. Bull.*, 5, 19-26, 2004.
- (102) S. Tikhonov. "On generalized Lipschitz classes and Fourier series" *Z. Anal. Anwendungen*, 23, 4, 745-764, 2004.
- (103) S. Tikhonov. "Generalized Lipschitz classes and Fourier coefficients" *Math. Notes*, 75, 5-6, 885-889, 2004.
- (104) S. Tikhonov. "On belonging of trigonometric series to Orlicz space" *Journal of Inequalities in Pure and Applied Mathematics*, V. 5, Is. 2, Article 22, 2004.

2003:

- (105) M.K. Potapov, B.V. Simonov, S. Tikhonov. "On Besov, Besov-Nikolskii classes and on the estimates of mixed smoothness moduli of fractional derivatives" *Trudy Matematicheskogo Instituta imeni V. A. Steklova*, 243, 244-256, 2003, translation in *Proceedings of the Steklov Institute of Mathematics*, Vol. 243, 234-246, 2003.
- (106) S. Tikhonov. "On the estimates of moduli smoothness of functions with transformed Fourier series" *Publ. Inst. Math. (Beograd)*, 73(87), 121-128, 2003.
- (107) S. Tikhonov. "Moduli of smoothness of fractional order and transformed Fourier series " *Ph.D. Thesis, Moscow State University*, 2003.

2002:

- (108) S. Tikhonov. "Moduli of smoothness and the interrelation of some classes of functions " *Function Spaces, Interpolation Theory and Related Topics: Proc. Conf. on Function Spaces, Interpolation Theory and Related Topics in Honour of Jaak Peetre on his 65th Birthday, August 17-22, 2000. Berlin: W. de Gruyter*, 413–423, 2002.