# Dmitriy M. Stolyarov

*Education*: St. Petersburg State University, Department of Mathematics and Mechanics, Chair of Mathematical Analysis, 2011;

PhD from St. Petersburg Department of the Steklov Mathematical Institute (December 2014), thesis "Differential operators and Fourier analysis: limit order embedding theorems and their applications" supervised by S. V. Kislyakov;

Affiliation: Chebyshev Lab and PDMI RAS.

Position: junior researcher;

Previous employment: Institute for Mathematics, Polish Academy of Sciences, Warsaw, post-doctoral fellow (February–July 2015)

Michigan State University, Department of Mathematics, postdoctoral fellow (August 2015–August 2017).

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Webpage: http://chebyshev.spb.ru/DmitriyStolyarov;

*Interests*: harmonic analysis, embedding theorems, extremal problems, Banach space theory, extremal combinatorics, spectral theory, convex geometry, additive combinatorics, geometric measure theory, martingale inequalities;

### Selected publications:

- Paata Ivanisvili, Dmitriy M. Stolyarov, Vasily I. Vasyunin, Pavel B. Zatitskiy, *Bellman function for extremal problems in BMO II: evolution*, to appear in Memoirs of American Mathematical Society.
- Dmitriy M. Stolyarov, Pavel B. Zatitskiy, Theory of locally concave functions and its applications to sharp estimates of integral functionals, Advances in Mathematics 291 (2016), 228–273.
- Sergey V. Kislyakov, Dmitriy V. Maksimov, Dmitriy M. Stolyarov, Differential expression with mixed homogeneity and spaces of smooth functions they generate in arbitrary dimension, Journal of Functional Analysis 269:10 (2015), 3220–3263.
- Alexander I. Nazarov, Dmitriy M. Stolyarov, Pavel B. Zatitskiy, *Tamarkin equiconvergence theorem and trace formula revisited*, Journal of Spectral Theory 4:2 (2014), 365–389.
- Paata Ivanishvili, Nikolay N. Osipov, Dmitriy M. Stolyarov, Vasily I. Vasyunin, Pavel B. Zatitskiy, Bellman function for extremal problems in BMO, Transactions of American Mathematical Society 368 (2016), 3415–3468.

Awards and personal grants:

AMS-Simons travel grant, 2016–2017.

St. Petersburg Mathematical Society prize (with Pavel Zatitskiy), 2015.

St. Petersburg Government Research grant for graduate students, 2014.

Gazprom Oil Stipend, 2013.

Rokhlin grant, 2012.

Students' competition of the St. Petersburg Mathematical Society (with A. L. Glazman and P. B. Zatitskiy), 2010.

### Teaching:

Practice class in probability (Fall 2017)

Practice class in analysis 1 (Fall 2017).

Calculus 1 MTH 132 (Michigan State, Spring and Fall 2016).

Reading group on additive combinatorics (IMPAN, Spring 2015).

Reading group on Ito's integration (Chebyshev Lab, Fall 2011 – Spring 2012).

St. Petersburg Center for gifted children, the 239 Mathematical School, math circle (2006-2013).

## Scientific visits:

IMPAN, Warsaw, 27 July - 3 August 2017;

University of Cincinnati, 5–19 April 2017;

Kent State University, 30 September − 2 October 2016;

University of Linz, 5–11 June 2016;

Kent State University, 22-24 November 2015;

University of Cincinnati, 9–15 November 2015;

 ${\bf Steklov\ Mathematical\ Institute,\ Moscow,\ 16\ September\ 2015;}$ 

Max Planck Institute for Mathematics in the Sciences, Leipzig, 8–10 July 2015;

University of Wroclaw, Institute for Mathematics, 15–17 June 2015;

 ${\bf Steklov\ Mathematical\ Institute,\ Moscow,\ 17\ September\ 2014;}$ 

Jagiellonian University, Department of Mathematics, Krakow, 5 April 2014;

IMPAN, Warsaw, 30 March-12 October 2014;

IMPAN, Warsaw, 6-19 October 2013.

## Conferences:

Introductory Workshop: Harmonic Analysis, MSRI, Berkley 23.01.2017 - 27.01.2017.

25th St.Petersburg Summer Meeting in Mathematical Analysis: Tribute to Victor Havin, St.-Petersburg 25.06.2016 –30.06.2016;

9th Whitney Problems Workshop, Technion, Haifa, 29.05.2016 - 3.06.2016;

6th Ohio River Analysis Meeting, Lexington, Kentucky, 12.03.2016 – 13.03.2016;

AMS Southeastern Sectional Meeting, University of Georgia, Athens, Georgia, 05.03.2016 – 06.03.2016;

"Harmonic analysis and Partial Differential Equations", Hausdorff Institute For Mathematics, University of Bonn, 20.06.2014 – 20.07.2014;

"The Bellman function technique in harmonic analysis", Institut Mittag-Leffler, Stockholm, 08.07.2013 - 12.07.2013;

"PDE and related questions" dedicated to the 110th anniversary of I. G. Petrovskiy, MSU, Moscow, 30.05.2011-4.06.2011.