

Alexander Koldobsky: CURRICULUM VITAE

Department of Mathematics
University of Missouri-Columbia
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ACADEMIC TRAINING

Ph.D., Mathematics, June 1982, St. Petersburg State University, Russia.

M.S., Mathematics and Mathematical Education, June 1977, St. Petersburg State Pedagogical Institute, Russia.

ACADEMIC POSITIONS

Curators Distinguished Professor, University of Missouri, 2019–present

Leonard M. Blumenthal Distinguished Professor, University of Missouri, 2002–2007

Professor, University of Missouri-Columbia, 1999–2019

Professor, University of Texas at San Antonio, 1998–1999

Associate Professor, University of Texas at San Antonio, 1995–1998

Assistant Professor, University of Texas at San Antonio, 1993–1995

Visiting Associate Professor, University of Missouri-Columbia, 1992–1993.

Visiting Member, Courant Institute, New York University, Feb. 1992–Aug. 1992

Associate Professor (half-time), Leningrad State University, 1990–1991.

Associate Professor, Leningrad University of Economics and Finance, 1987–1991.

Assistant Professor, Leningrad University of Economics and Finance, 1984–1987.

Researcher, Leningrad Research Institute of Chemical Fibers, 1979–1984.

Army Service, 1977-1979

Teacher, Math and Science Boarding School # 45, Leningrad, Russia, 1976-1977

GRANTS

Current:

NSF Research Grant DMS-1700036: Fourier Analysis in Geometric Tomography, 6/1/17 – 5/31/21, \$219,000 (PI)

NSF Research Grant DMS-2054068: Fourier Analysis in Convex Geometry, 7/1/21 – 6/30/24, \$264,017 (PI)

Expired:

NSF Research Grant DMS-1265155, 8/1/13 – 7/31/17, \$180,207 (PI)

NSF Research Grant DMS-1001234, 7/1/10– 6/30/13, \$159,999 (PI)

NSF FRG Grant DMS-0652571, 7/1/07– 6/30/11, \$469,998 (Co-PI)

NSF Research Grant DMS-0455696, 7/1/05– 6/30/08, \$142,075 (PI)

NSF Research Grant DMS-0136022, 7/1/02– 6/30/05, \$77,994 (PI)
NSF Research Grant DMS-9996431, 7/1/99– 6/30/02, \$72,000 (PI)
NSF Research Grant DMS-9531594, 7/1/96– 6/30/99, \$64,577 (PI)
NSF Conference Grant DMS-1566573, 1/1/16 – 12/31/16, \$16,201 (Co-PI)
University of Missouri Research Board Grant, 02/01/16–01/31/17, \$3,860 (PI)
University of Missouri Research Board Grant, 03/01/10–02/28/12, \$10,000 (PI)
University of Missouri Research Board Grant, 01/01/05–12/31/05, \$14,100 (PI)
Grant from the Max Planck Foundation to stay at MPIM-Bonn (two months), 2019;
Grant from the Max Planck Foundation to stay at MPIM-Bonn (three months), 2015;
Grant from the Max Planck Foundation to stay at MPIM-Bonn (three months), 2011;
Research in Teams Grant, BIRS, Canada, August 2–9, 2020;
Research in Teams Grant, BIRS, Canada, August 16-23, 2015;
Research in Pairs Grant, MFO Oberwolfach, Germany, May 17-30, 2015

AWARDS

Curators Distinguished Professor, University of Missouri, 2019–present
Chern Distinguished Professor, MSRI, Berkeley, CA, Fall 2017
Leonard M. Blumenthal Distinguished Professor, University of Missouri, 2002–2007
NSF-CBMS conference, principal lecturer, Kansas State University, July 2006
Advisor of V. Yaskin, recipient of the 2006 University of Missouri Distinguished Dissertation Award
University of Missouri Provost's Research Leave, 09/01/17–12/31/17
University of Missouri Provost's Research Leave, 09/01/15–05/31/16
University of Missouri Provost's Research Leave, 09/01/11–05/31/12
University of Missouri Provost's Research Leave, 09/01/07–05/31/08
University of Missouri Provost's Research Leave, 09/01/03–05/31/04
UTSA Faculty Development Leave for Spring 1998
UTSA President's Award in Recognition of Research Excellence, 1998

VISITING POSITIONS

Visiting Researcher, Max Planck Institute, Bonn, Germany, May-June 2019
Organizer and Chern Distinguished Professor, MSRI, Berkeley CA, Fall 2017
Visiting Researcher, Max Planck Institute, Bonn, Germany, March-May 2015
Visiting Professor, University of Kiel, Germany, July 2012
Visiting Researcher, CRM, Montreal, Canada, May 2012
Visiting Researcher, Max Planck Institute, Bonn, Germany, March-May 2011
Visiting Researcher, Fields Institute, Toronto, Canada, September 2010

Visiting Professor, University of Toulouse, France, June-July 2006

Visiting Professor, EU Marie Curie Transfer of Knowledge Program, Institute of Mathematics, Polish Academy of Sciences, March-June 2006

Visiting Professor, University of Kiel, Germany, November 2003

Visiting Professor, Université de Marne-La-Vallee, France, May-June 1999, October 2001, June 2003

Visiting Associate Professor, Weizmann Institute of Science, Israel, Spring 98

GRADUATE STUDENTS

Geoff Diestel, M.S., May 2003

Jared Schlieper, M.S., May 2005

Vladyslav Yaskin, PhD, May 2006, Assistant Professor, University of Alberta, Edmonton

Marina Yaskina, PhD, May 2006, Postdoctoral fellow, University of Alberta, Edmonton

Jared Schlieper, PhD, May 2008, Assistant Professor, Armstrong Atlantic State University

Marisa Zymonopoulou, PhD, May 2008, Visiting Assistant Professor, Case Western Reserve University

Chris Shane, PhD, May 2009, Assistant Professor, Southwestern Oklahoma State Univ.

Patrick Spencer, M.A., August 2011

Dan Ma, 2010-2011

Daniel Fresen, PhD, May 2012, Gibbs Assistant Professor, Yale University

Patrick Spencer, PhD, May 2015, Lecturer, University of Kentucky

Denghui Wu, visiting student from Southwest University, China, 2016-2017

Wyatt Gregory, 2018 - current

POSTDOCS

Dmitri Ryabogin, 2000–2003, Assistant Professor, Kansas State University

Artem Zvavitch, 2001–2004, Assistant Professor, Kent State University

Witold Bednorz, 2007–2008, Assistant Professor, University of Warsaw, Poland

Leonid Slavin, 2007–2009, Assistant Professor, University of Cincinnati

Deping Ye, 2009–2010, Assistant Professor, Memorial University, Canada

Susanna Dann, 2011-2014, Faculty, Technical University of Vienna, Austria

RESEARCH SEMESTER ORGANIZER

Semester Program on Harmonic Analysis and Convexity, Institute for Computational and Experimental Research in Mathematics (ICERM), Providence, RI, 2022;

Semester Program on Geometric Functional Analysis and Applications, MSRI, Berkeley, CA, Fall 2017;

CONFERENCE ORGANIZER

Workshop on Geometric Tomography, Banff International Research Station, Canada, 2020;
AMS Special Session on Analytic and Probabilistic Methods in Convex Geometry, Manoa, Hawaii, March 2019;

Conference on Affine and Asymptotic Geometric Analysis, ICM 2018 Satellite Conference, member of Scientific Advisory Committee, Rio de Janeiro, Brazil, July 2018;

Introductory Workshop, Semester Program on Geometric Functional Analysis and Applications, MSRI, Berkeley, CA, 2017;

Workshop on Recent Developments in Convex and Discrete Geometry, Banff International Research Station, Canada, 2017;

Conference on Geometric Functional Analysis, Edmonton, Canada, 2016;

Workshop on Asymptotic Geometric Analysis, Oberwolfach, Germany, 2016;

Workshop on Geometric Tomography, Banff International Research Station, Canada, 2014;

AMS Special Session on Convex Geometry and Applications, St Louis, MO, 2013;

Workshop on Sections of Convex Bodies, American Institute of Mathematics, Palo Alto, CA, 2013;

Workshop on Harmonic Analysis in Convex Geometry, Banff International Research Station, Canada, 2011;

Workshop on Mahler's Conjecture and Duality in Convex Geometry, American Institute of Mathematics, Palo Alto, CA, 2010;

Conference on Perspectives in High Dimensions, Cleveland, OH, 2010;

Workshop on Fourier Analytic Methods in Convex Geometry, American Institute of Mathematics, Palo Alto, CA, 2007;

NSF/FRG Conference on Convex Geometry, University of Missouri, 2008;

Summer School on Fourier Analytic and Probabilistic Methods in Geometric Functional Analysis and Convexity, Kent, OH, 2008

AMS Sectional Meeting, Special Session on Fourier Analysis and Convexity, Stevens Institute of Technology, Hoboken, NJ, 2007

PUBLICATIONS

Books:

Fourier Analysis in Convex Geometry, Mathematical Surveys and Monographs, American Mathematical Society, Providence RI, 2005, 170 p.

The Interface between Convex Geometry and Harmonic Analysis, CBMS Regional Conference Series, American Mathematical Society, Providence RI, 2008, 103 p. (with V.Yaskin)

Papers in convex geometric analysis:

Inequalities for the Radon transform on convex sets, submitted (with A.Giannopoulos and A.Zvavitch))

Inequalities for the derivatives of the Radon transform on convex bodies, Israel J. Math., to appear (with W.Gregory)

Measure comparison and distance inequalities for convex bodies, Indiana Univ. Math. J., to appear (with G.Paouris and A.Zvavitch)

On the maximal perimeter of sections of the cube, Adv. Math. 346 (2019), 773–804 (with H.König)

Estimating volume and surface area of a convex body via its projections or sections, Studia Math. 244 (2019), 245–264 (with C. Saroglou and A. Zvavitch)

Estimates for moments of general measures on convex bodies, Proc. Amer. Math. Soc. 146 (2018), 4879–4888 (with S.Bobkov and B.Klartag)

An example related to the slicing inequality for general measures, J. Funct. Anal. 274 (2018), 2089–2112 (with B. Klartag)

On polynomially integrable convex bodies, Adv. Math. 320 (2017), 876–886 (with A. Merkurjev and V.Yaskin)

Extensions of reverse volume difference inequalities, In: Analytic Aspects of Convexity, G.Bianchi, A.Colesanti, P.Gronchi, editors (Proceedings of the Workshop on Convex Geometry-Analytic Methods, Rome 2016), Springer, Cham, 2018, 61–71 (with Denghui Wu)

Volume difference inequalities, Trans. Amer. Math. Soc. 370 (2018), 4351–4372. (with A. Giannopoulos)

On the average volume of sections of convex bodies, Israel J. Math. 222 (2017), 921–947 (with S.Brazitikos, S.Dann and A.Giannopoulos)

Inequalities for the surface area of projections of convex bodies, Canadian J. Math. 70 (2018), 804–823 (with A.Giannopoulos and P.Valettas)

Measures of sections of convex bodies, in: Convexity and Concentration, The IMA Volumes in Mathematics and its Applications, Springer (E. Carlen, M. Madiman, E. Werner, editors) 161 (2017), 565–575.

A remark on measures of sections of L_p -balls, GAFA Seminar Notes, Lect. Notes in Math. 2169 (2017), 213–220 (with A.Pajor).

Stability inequalities for projections of convex bodies, Discrete Comput. Geom. 57 (2017), 152–163.

Variants of the Busemann-Petty problem and of the Shephard problem, Int. Math. Res. Not. IMRN, 2017, no.3, 921–943 (with A.Giannopoulos).

Slicing inequalities for subspaces of L_p , Proc. Amer. Math. Soc. 144 (2016), 787–795.

Isomorphic Busemann-Petty problem for sections of proportional dimensions, Adv. in Appl. Math. 71 (2015), 138–145.

Slicing inequalities for measures of convex bodies, Adv. Math. 283 (2015), 473–488.

The slicing problem for sections of proportional dimensions, Max Planck Institute Preprint Series, 2015-24

An isomorphic version of the Busemann-Petty problem for arbitrary measures, *Geom. Dedicata* 174 (2015), 261–277 (with A.Zvavitch)

Estimates for measures of sections of convex bodies, *Geometric Aspects of Functional Analysis*, GAFA Seminar Notes, *Lect. Notes in Math.* 2116 (2014), 261–271.

A \sqrt{n} estimate for measures of hyperplane sections of convex bodies, *Adv. Math.* 254 (2014), 33–40.

Stability and separation in volume comparison problems, *Math. Model. Nat. Phenom.* 8 (2013), 156–169

Complex intersection bodies, *J. London Math. Soc.* 88(2) (2013), 538–562 (with G.Paouris and M.Zymonopoulou)

On the maximal measure of sections of the n -cube, *AMS Contemporary Math. Series* 599 (2013), 123–155 (with H.Koenig)

Stability and slicing inequalities for intersection bodies, *Geom. Dedicata* 162 (2013), 325–335 (with Dan Ma)

A hyperplane inequality for measures of convex bodies in R^n , $n \leq 4$, *Discrete Comput. Geom.* 47 (2012), 538–547.

Minimal volume of slabs in the complex cube, *Proc. Amer. Math. Soc.* 140 (2012), 1709–1717 (with H.König)

Volumes of lower-dimensional slabs and sections in the cube, *Adv. Appl. Math.* 47 (2011), 894–907 (with H.König)

Isomorphic properties of intersection bodies, *J. Funct. Anal.* 261 (2011), 2697–2716 (with G.Paouris and M.Zymonopoulou)

Isomorphic properties of intersection bodies, *Max Planck Institute Preprint Series*, 2011-28 (with G.Paouris and M.Zymonopoulou)

Stability in the Busemann-Petty and Shephard problems, *Adv. Math.* 228 (2011), 2145–2161.

Stability in volume comparison problems, *Max Planck Institute Preprint Series*, 2011-18

Stability in volume comparison problems for complex convex bodies, *Arch. Math.* 97 (2011), 91–98.

The complex Busemann-Petty problem on sections of convex bodies, *Advances in Math.* 218 (2008), 352–367 (with H.König and M.Zymonopoulou)

Inequalities of the Kahane-Khinchin type and sections of L_p -balls, *Studia Mathematica* 184 (2008), 217–231 (with A.Pajor and V.Yaskin)

The geometry of L_0 , *Canadian J. Math.* 59 (2007), 1029–1049 (with N.Kalton, V.Yaskin and M.Yaskina)

Determination of convex bodies by derivatives of section functions, *Archiv Math.* 88 (2007), 279–288 (with C.Shane)

Modified Busemann-Petty problem on sections of convex bodies, Israel J. Math. 154 (2006), 191–208 (with V.Yaskin and M.Yaskina)

Intersection bodies and L_p -spaces, Advances in Math. 196 (2005), 257–275 (with N.Kalton)

Comparison of volumes by means of areas of central sections, Advances in Applied Math. 33 (2004), 728–732.

Extremal sections of complex l_p -balls, $0 < p \leq 2$, Studia Mathematica 159 (2003), 185–194 (with M.Zymonopoulou)

Fourier methods in the study of sections and projections of convex bodies, In: Fourier analysis and convexity, L.Brandolini et al, eds, Birkhauser, 2004, p. 119–130 (with D.Ryabogin and A.Zvavitch)

Projections of convex bodies and the Fourier transform, Israel J. Math. 139 (2004), 361–380 (with D.Ryabogin and A.Zvavitch)

The Busemann-Petty problem via spherical harmonics, Advances in Math. 177 (2003), 105–114

Extremal slabs in the cube and the Laplace transform, Advances in Math. 174 (2003), 89–114 (with F.Barthe)

Sections of star bodies and the Fourier transform, in Harmonic Analysis at Mount Holyoke, Proceedings of AMS-IMS-SIAM Joint Summer Research Conference on Harmonic Analysis, Contemp. Math. 320 (2003), 225–248

On the central limit property of convex bodies, GAFA Seminar volume, Lecture Notes in Math. 1807 (2003), 44–52. (with S.Bobkov)

On the derivatives of X-ray functions, Archiv Math. 79 (2002), 216–222.

Average volume of sections of star bodies, Geometric Aspects of Functional Analysis, V.Milman and G.Schechtman, eds., Lecture Notes in Mathematics 1745 (2000), 119–146 (jointly with M.Lifshits).

A functional analytic approach to intersection bodies, Geometric and Functional Analysis (GAFA) 10 (2000), 1507–1526

A generalization of the Busemann-Petty problem on sections of convex bodies, Israel J. Math. 110 (1999), 75–91

An analytic solution to the Busemann-Petty problem on sections of convex bodies, Annals of Math. 149 (1999), 691–703 (with R.J. Gardner and Th. Schlumprecht)

An analytic solution to the Busemann-Petty problem, C. R. Acad. Sci Paris 328 (1999), 29–34 (with R.J.Gardner and Th.Schlumprecht)

Intersection bodies, positive definite distributions and the Busemann-Petty problem, Amer. J. Math. 120 (1998), 827–840

Intersection bodies in R^4 , Advances in Math. 136 (1998), 1–14

Second derivative test for intersection bodies, Advances in Math. 136 (1998), 15–25

An application of the Fourier transform to sections of star bodies, Israel J. Math. 106 (1998), 157–164

Intersection bodies and the Busemann-Petty problem, C. R. Acad. Sci Paris 325 (1997), 1181–1186

Papers in harmonic analysis and probability:

Schoenberg's problem on positive definite functions, Algebra i Analiz 3 (1991), 78-85; English translation in St. Petersburg Math. J. 3 (1992), 563-570.

Positive definite functions and stable random vectors, Israel J. Math. 185 (2011), 277-295.

A note on positive definite norm dependent functions, In: High Dimensional Probability V: The Luminy Volume, IMS Collections 5 (2009), 30-36.

A short proof of Schoenberg's conjecture on positive definite functions, Bull. London Math. Soc. 31 (1999), 693-699 (with Y. Lonke).

A correlation inequality for stable random vectors, In: Advances in Stochastic Inequalities, AMS Special Session on Stochastic Inequalities and their applications, Atlanta, 1997, Contemporary Mathematics 234 (1999), 121-124.

Positive definite distributions and subspaces of L_{-p} with applications to stable processes, Canad. Math. Bull. 42 (1999), 344-353.

A remark on positive isotropic random vectors, In: Functional Analysis and Economic Theory, Y. Abramovich, E. Avgerinos, N.C. Yannelis (Eds.), Springer-Verlag, 1998, 9-15 (with A. Arias)

Inequalities of correlation type for symmetric stable random vectors, Stat. Probab. Letters 28 (1996), 91-97 (with S. Montgomery-Smith)

Inverse formula for the Blaschke-Levy representation, Houston J. Math. 23 (1997), 95-107

Positive definite functions, stable measures, and isometries on Banach spaces, Lect. Notes in Pure and Appl. Math. 175 (1996), 275-290.

The Fourier transform of order statistics with applications to Lorentz spaces, Israel J. Math. 92 (1995), 411-425 (with S. Dilworth)

Characterization of measures by potentials, J. Theor. Prob. 7 (1994), 135-145.

Generalized Levy representation of norms and isometric embeddings into L_p -spaces, Ann. Inst. H. Poincare, Prob. et Stat., ser.B 28 (1992), 335-353.

The Fourier transform and convolution in the space l_1 , Proceedings of the Leningrad Branch of the Steklov Institute: Problems of Theory of Probabilistic Distributions 194 (1992), 98-105; English translation in J. Math. Sci, New York 75 (1995), 1935-1939.

Convolution equations in certain Banach spaces, Proc. Amer. Math. Soc. 111 (1991), 755-765

The Fourier transform technique for convolution equations in infinite dimensional l_q -spaces, Math. Ann. 291 (1991), 403-407.

Inverse problem for potentials of measures in Hilbert spaces, Proc. of the Leningrad Branch of the Steklov Institute 177 (1989), 73-77.

Inverse problems for potentials of measures in Banach spaces, Probability Theory and Mathematical Statistics, Proc. 5th Vilnius Conference 1989, Vol.1, Mokslas-VSP, Utrecht, 627-637.

Measures on spaces of operators and isometries, J. Soviet Math. 42 (1988), 1628-1636; translation from Zap. Nauchn. Semin. Leningr. Otd. Mat. Inst. Steklova 149, 127-136 (1986)

On potentials of measures in Banach spaces, Siberian Math. J. 28 (1987), 65-80 (with E.A. Gorin)

On potentials identifying measures on Banach spaces, Soviet Math. Dokl. 32 (1985), 659-663. (with E.A. Gorin)

Uniqueness theorem for measures in $C(K)$ and its applications to stochastic processes, J. Soviet Math. 27 (1984), 3095-3102; translation from Zap. Nauchn. Semin. Leningr. Otd. Mat. Inst. Steklova 119 (1982), 144-153.

Papers in functional analysis:

Sobolev spaces with only trivial isometries, Positivity 10 (2006), 135–144 (with G. Diestel)

Banach spaces embedding isometrically into L_p when $0 < p < 1$, Proc. Amer. Math. Soc. 132 (2004), 67–76 (with N.Kalton)

Aspects of the isometric theory of Banach spaces, Handbook of the Geometry of Banach Spaces, W.B.Johnson and J.Lindenstrauss, eds, Elsevier, 2001, p. 899–939 (with H. König)

A Banach subspace of $L_{1/2}$ which does not embed in L_1 (isometric version), Proc. Amer. Math. Soc. 124 (1996), 155–160

Isometric stability properties of certain Banach spaces, Canad. Math. Bull. 38 (1995), 93–97.

Isometries of L_p -spaces of solutions of homogeneous partial differential equations, Lect. Notes in Pure and Appl. Math. 172 (1995), 251–263.

Common subspaces of L_p -spaces, Proc. Amer. Math. Soc. 122 (1994), 207–212

Operators preserving orthogonality are isometries, Proc. Royal Soc. of Edinburgh 123 A (1993), 835-837.

Isometries of $L_p(X; L_q)$ and equimeasurability, Indiana Univ. Math. J. 40 (1991), 677-705.

On minimal projections generated by isometries of Banach spaces, Commentationes Math. 27 (1988), 265-274 (with V. Odinec)

Convolution metrics on spaces of measures and almost isometric operators in L_p , J. Soviet Math. 44 (1989), 852-855

Isometries of the spaces $L_p(X; L_q)$ and equimeasurability, Izv. Vuzov. Matematika, 1989, No.3, 25-34

On isometric operators in vector valued L_p -spaces, Proceedings of Leningrad Branch of the Steklov Institute 107 (1982), 198-203; English translation in J. Sov. Math. 36 (1987), 420–423.

Isometric classification of L_p -spaces of solutions of homogeneous elliptic equations, Contemporary Problems of Function Theory and Functional Analysis, Karaganda State Univ., 1980, 90-100

On isometric operators in $L_p(X; R^n)$, Functional Analysis (A. V. Strauss, editor) 12 (1979), 90-99

Extension of isometries in Orlicz spaces, Mat., Gercen Ctenija 30 (1977), 61-66 (Zbl 0369.46029)

Papers in engineering:

Morphological regularization neural networks, Pattern Recognition 33 (2000), 935–944 (with P.Gader and M.Khabou)

Calculation of the process of multistage complex yarn washing, Fibre Chemistry 17 (1985), #5, 316-320 (with K. E. Perepelkin, V. M. Lishevich, M. D. Gluz, D. I. Fridman).

Kinetic approach to evaluating the influence of active admixtures in the reactions of polycondensation, Journal of Applied Chemistry, 1984, #4 (four coauthors)

Probability nature of the size effect in yarn strength, Fibre Chemistry 16 (1984), #4, 274-276 (with E.Ya.Sorokin).

Effect of the polymer matrix on the properties of fibres prepared by sintering polymer dispersions, Fibre Chemistry 15 (1983), #6, 438-441 (with G. S. Dreizenshtok, E. Ya. Sorokin, K. E. Perepelkin, L. V. Slin'ko).

Effect of heat-stretching on the linear density of Polifen fibres, Fibre Chemistry 15 (1983), #2, 101-102 (with E. Ya. Sorokin, G. S. Dreizenshtok, E. E. Robakovskaya).

Relationship between nonuniformity in linear density and the strength of polifen fibre, Fibre Chemistry 14 (1982), #5, 348-349 (with E. Ya. Sorokin, G. S. Dreizenshtok, K. E. Perepelkin, L. V. Slin'ko).

Investigation of the distribution of fiber strength, Izvestiya Vuzov. Textile Industry, 1982, #3 (five coauthors)

Papers in mathematical economics:

One-parameter systems of economical stimulating, Structure of Production Management, Leningrad Institute of Economics and Finance, 1987

Economical stimulating of fuel saving, Fireproofs, 1987, #10 (three coauthors)

Course notes for business students:

Linear algebra for business students, Leningrad University of Economics and Finance, 1987

Statistical data managing, Leningrad University of Economics and Finance, 1987

Mathematical models of economical stimulating, Leningrad University of Economics and Finance, 1987

PRESENTATIONS

Series' of lectures: Workshop on Convexity and Geometric Aspects of Harmonic Analysis, Georgia Institute of Technology, Atlanta, GA, 2019 (series of three lectures); Workshop on Phenomena in High Dimensions, Sevilla, Spain, 2008 (series of four lectures); NSF-CBMS Regional Conference on the Interplay between Convex Geometry and Harmonic

Analysis, Manhattan, KS, 2006 (principal speaker - ten lectures); Workshop on Fourier Analysis and Convexity, Milan, Italy, 2001 (series of three lectures).

Colloquium Talks: Max Planck Institute for Mathematics, Bonn, Germany, 2019; University of Jena, Germany, 2019; University of Kiel, Germany, 2019; University of California at Santa Cruz, 2017; New York University School of Engineering, 2017; Georgia Institute of Technology, 2016; Kent State University, 2016; University of Innsbruck, Austria, 2015; University of Kiel, Germany, 2015; University of Mainz, Germany, 2015; Universidad Complutense Madrid, Spain, 2014; Polytechnic Institute of New York University, 2013; University of Kiel, Germany, 2012; Kent State University, 2011; University of Jena, Germany, 2011; Karlsruhe Institute of Technology, Germany, 2011; Polytechnic Institute of New York University, 2010; University of Kiel, Germany, 2009; Temple University, 2009; University of Texas at San Antonio, 2009; University of Sevilla, Spain, 2008; Texas A&M University, 2008; University College London, 2007; Kent State University, 2007; University of Oklahoma, 2007; University of Kiel, Germany, 2007; Tufts University, 2007; University of Texas at San Antonio, 2006; University of Denver, 2005; De Paul University, Chicago, IL, 2004; Kent State University, 2004; Polytechnic University, Brooklyn, NY, 2004; College of William and Mary, Williamsburg, Virginia, 2004; University of Kiel, Germany, 2003; University of New Hampshire, 2003; University of South Carolina, 2002; Georgia Institute of Technology, 2001; University of California at Riverside, 2001; University of Connecticut at Storrs, 2000; Case Western Reserve University, 1999; Kent State University, 1999, 2001; University of Freiburg, Germany, 1998; University of Karlsruhe, Germany, 1998; University of Missouri-Columbia, 1997; Texas A&M University, 1997; Massachusetts Institute of Technology, 1997; Free University Berlin, 1997; University of Memphis, 1995, 1997; University of Missouri-Columbia, 1995; University of California at Riverside, 1993; Indiana University–Purdue University at Indianapolis, 1993; The Citadel, Military College of South Carolina, 1993; Oklahoma State University, 1993; Southern Illinois University at Edwardsville, 1993; University of Texas at San Antonio, 1993; University of Missouri-Columbia, 1993; University of Kiel, Germany, 1991.

Invited 1-hour Seminar Talks: Online Seminar on Asymptotic Geometric Analysis, 2020; Geometry Seminar, Technical University Berlin, Germany, 2019; Probability Seminar, University of Warsaw, Poland, 2019; Analysis & PDE Seminar, UCLA, 2016; Probability Seminar, University of Delaware, 2015; Geometry Seminar, Technical University Berlin, Germany, 2015; Stochastics Seminar, Karlsruhe Institute of Technology, Germany, 2015; Stochastics Oberseminar, University of Osnabrueck, Germany, 2015; Analysis Seminar, University Paris Est Marne la Vallee, France, 2015; Oberseminar, Max Planck Institute for Mathematics, Bonn, Germany, 2015; Analysis /Probability Learning Seminar, University of Michigan, 2015; Analysis /Probability Seminar, University of Michigan, 2015; Geometry Seminar, Universidad Murcia, Spain, 2014; Analysis Seminar, Universidad Valencia, Spain, 2014; Analysis Seminar, University of Kiel, Germany, 2012; Geometry Seminar, Shanghai University, 2011; Oberseminar, Max Planck Institute of Mathematics, Bonn, Germany, 2011; Geometry Seminar, University of Magdeburg, Germany, 2011; Analysis Seminar, Norwegian University of Science and Technology, Trondheim, Norway, 2011; Analysis Seminar, University of Kiel, Germany, 2011; Functional Analysis Seminar, Institute of Mathematics, Polish Academy of Sciences, 2011; Geometry Seminar, Vienna Tech-

nical University, Austria, 2011; Analysis Seminar, University of Michigan, 2010; Analysis Seminar, University of Wisconsin at Madison, 2009; Functional Analysis Seminar, University of Paris 6, 2009; Functional Analysis Seminar, University of Alberta, Canada, 2009; Analysis Seminar, University of Kiel, Germany, 2009; Functional Analysis Seminar, University of Paris 6, 2007; Linear Analysis Seminar, Texas A&M University, 2007; Functional Analysis Seminar, University of Alberta, Canada, 2007; Analysis Seminar, Concordia - McGill Universities, Canada, 2007; Analysis Seminar, University of Orleans, France, 2006; Probability Seminar, University of Toulouse, France, 2006; Probability Seminar, Technical University of Wroclaw, Poland, 2006; Probability Seminar, University of Warsaw, Poland, 2006; Functional Analysis Seminar, University of Alberta at Edmonton, 2006; Functional Analysis Seminar, Institute of Mathematics, Polish Academy of Sciences, 2006; Free University Berlin, 2005; University of Kiel, Germany, 2005; John Hopkins University, 2004; Kansas State University, 2003; University of Southern Denmark, 2003; University of Kiel, Germany, 2003; University of Milan-Bicocca, 2002; Université Paris 6, 1998, 1999, 2001, 2003; Université de Marne-La-Vallee, France, 1998, 1999; Hebrew University, Jerusalem, Israel, 1998; Technion-Israel Institute of Technology, 1998; Weizmann Institute of Science, 1998; University of Kiel, Germany, 1997; Institute of Mathematics, Polish Academy of Sciences, 1997; University of Jena, Germany, 1997; University of Paderborn, Germany, 1997; Adam Mickiewicz University, Poznan, Poland, 1997; Wroclaw Technical University, Poland, 1997; University of Tennessee at Knoxville, 1997; Georgia Institute of Technology, 1997; Texas A&M University, 1995, 1996; University of Texas at Austin, 1993, 1995, 1997; University of Illinois at Urbana-Champaign, 1993; University of California at Los Angeles, 1993; Bowling Green State University, 1993; University of Wisconsin-Madison, 1993; Washington University at St Louis, 1993; University of Missouri-Columbia, 1992; Bell Laboratories, 1992; Memphis State University, 1992; Mathematical Institute of the Ukrainian Academy of Sciences, 1991; University of Paderborn, Germany, 1990; Free University Berlin, 1990, 1991; Wroclaw Technical University, Poland, 1989, 1991; University of Jena, Germany, 1987; Leningrad State University, 1982-1991, yearly; Steklov Institute, Leningrad Branch, 1982-1991, yearly; Moscow State University, 1982, 1984, 1987, 1990.

Conference Talks: AMS Special Session on Convexity and High-Dimensional Probability, Chattanooga, TN (20 min talk), 2020; The Missouri Analysis Symposium, Columbia MO (25-minute talk), 2019; Workshop on Convex Geometry and its Applications, Oberwolfach, Germany (20-minute talk), 2018; Conference on Recent Developments in Functional Analysis, Kent OH (plenary lecture), 2018; American Mathematical Society Special Session on Convex Geometry and Functional Inequalities, Newark DE (20-minute talk), 2018; Workshop on Emerging Trends in Geometric Functional Analysis, Banff, Canada (30-minute talk), 2018; Workshop on Analytic Aspects of Convexity, Rome, Italy (30-minute talk), 2016; American Mathematical Society Special Session on Convexity and Harmonic Analysis, Fargo (50-minute talk), 2016; Workshop on Analytic Tools in Probability, IMA, Minneapolis (plenary lecture), 2015; Conference on the occasion of retirement of Prof Hermann Koenig, Kiel, Germany (plenary lecture), 2014; Pelczynski Memorial Conference, Bedlewo, Poland (plenary lecture), 2014; American Mathematical Society Special Session on Harmonic Analysis and Applications, Baltimore (30-minute talk), 2014; Conference on Banach Spaces: Geometry and Analysis, Jerusalem, Israel (30-min talk), 2013; Confer-

ence on Complex Analysis and Dynamical Systems, Nahariya, Israel (45-min talk), 2013; Workshop on Interplay of Convex Geometry and Banach Space Theory, Banff, Canada (30-min talk), 2013; Workshop on Integral Geometry and its Applications, Oberwolfach, Germany (plenary lecture), 2013; Workshop on Convex Geometry and Applications, Oberwolfach, Germany (20-min talk), 2012; AMS Special Session on Harmonic Analysis and Convexity, Akron, OH (20-min talk), 2012; Informal Analysis Seminar, Kent, OH (plenary lecture), 2012; Workshop on Convex Geometric Analysis, Heraklion, Greece, 2012 (plenary lecture); Conference on Phenomena in High Dimensions in Geometric Analysis, Random Matrices, and Computational Geometry, Roscoff, France, 2012 (plenary lecture); Workshop on Convexity and Asymptotic Geometric Analysis, CRM, Montreal, Canada, 2012 (plenary lecture); Workshop on Geometric Analysis on Euclidean and Homogeneous Spaces, Boston, MA, 2012 (30 min talk); Southeastern Geometry Seminar, Birmingham, AL, 2011 (plenary lecture); Workshop on Integral and Convex Geometry, Chern Institute of Mathematics, Tianjin, China, 2011 (30 min talk); Workshop on High Dimensional Probability, Banff, Canada, 2011 (30 min talk); Workshop on Convex Geometry-Analytic Methods, Cortona, Italy, 2011 (20 min talk); 6th Conference on Function Spaces, Edwardsville, IL, 2010 (plenary lecture); Informal Analysis Seminar, Kent, OH, 2010 (plenary lecture); Convex Geometry and its Applications, Oberwolfach, Germany, 2009 (20 min talk); Conference on Probability in Asymptotic Geometric Analysis, College Station, TX, 2009 (plenary lecture); Conference on the State of Geometry and Functional Analysis, Tel Aviv, Israel (15 min talk) Conference Probability and Geometry of Convex Bodies, Haifa, Israel, 2009 (plenary lecture); Conference on High Dimensional Probability, Luminy, France, 2008 (plenary lecture); Workshop on Fourier Methods in Convex Geometry, American Institute of Mathematics, Palo Alto, CA, 2007 (one-hour talk); Conference on Phenomena in High Dimensions, Samos, Greece, 2007; Conference on Convex and Fractal Geometry, Bedlewo, Poland, 2007 (plenary lecture); AMS Special Session on Radon Transforms, New Orleans, 2007; Konvexgeometrie, Oberwolfach, Germany, 2006; Workshop on Convex Sets and their Applications, Banff, Canada, 2006; Seminar on Analysis, University of Missouri, 2005 (one-hour talk); Conference on Convex Geometry and High Dimensional Phenomena, Vienna, Austria, 2005; Workshop on Geometric aspects of analysis and probability, Schroedinger Institute, Vienna, Austria, 2005 (one-hour talk); Contemporary Ramifications of the Banach Space Theory, Jerusalem, Israel, 2005; Workshop on Geometric Inequalities, Florence, Italy, 2005; Southeast Geometry Conference, Columbia, SC, 2005 (plenary lecture); Informal Regional Functional Analysis Seminar, Texas A&M Univ., 2004 (plenary lecture); Joint AMS-SIAM-IMS Summer Research Meeting - Gaussian Measures and Convex Geometry, Snowbird, Utah, 2004 (plenary lecture); AMS Special Session on Analytic Convex Geometry, Lawrenceville, NJ 2004; Workshop on Convex Geometry - Analytic Methods, Cortona, Italy, 2003 (plenary lecture); Conference on Banach Spaces, Oberwolfach, Germany, 2003 (one-hour talk); Conference on Banach Spaces and Convex Geometric Analysis, Kiel, Germany 2003 (one-hour talk); Workshop on Combinatorial and Number-Theoretic Methods in Harmonic Analysis, Erwin Schroedinger Institute, Vienna, 2003 (one-hour talk); AMS Special Session on Banach Spaces and Convex Geometry, Baltimore, MD 2003 (one-hour expository talk); AMS Special Session on Convex Geometry, Boston, MA 2002; Workshop on Asymptotic Geometric Analysis, Vancouver, Canada,

2002 (plenary lecture); Conference on High Dimensional Probability, Sandbjerg, Denmark, 2002; AMS-IMU Special Session on Analytic Methods in Convex Geometry, Pisa, Italy, 2002; 4th Conference on Function Spaces, Edwardsville, IL 2002 (plenary lecture); AMS Special Session on Harmonic Analysis, Atlanta, GA 2002; The Lindenstrauss Festival, Kent State University, 2001 (plenary lecture); Workshop on Geometric Convex Analysis, Crete, Greece, 2001 (keynote speaker); AMS-IMS-SIAM Summer Research Conference on Harmonic Analysis, Mt Holyoke, MA, 2001 (plenary lecture); Konvexgeometrie, Conference in Oberwolfach, Germany, 2001; AMS Special Session on Banach Spaces, Columbia, SC, 2001; Workshop on Linear Analysis and Probability, College Station, TX 2000; AMS Special Session on Invariants in Convex Geometry, Lowell, MA 2000; Wabash Analysis Conference, Indianapolis, 1999 (plenary lecture); AMS Special Session on Banach and Operator Spaces, Austin, TX 1999; Workshop on Geometric Functional Analysis, Vancouver, Canada, 1999; Conference on Geometric Aspects of Fourier and Functional Analysis (Satellite meeting for ICM98), Kiel, Germany (plenary lecture), 1998; Konvexgeometrie, Conference in Oberwolfach, Germany, 1997 (main talk); Summer Meeting of the Canadian Mathematical Society, Special Session on Convex Geometry, St. John, 1998; Informal Regional Functional Analysis Seminar, College Station, TX, 1997 (plenary lecture); AMS Special Session on Modern Banach Space Theory, Atlanta, GA, 1997; AMS Special Session on Stochastic Inequalities, Atlanta, GA, 1997; AMS Special Session on Harmonic Analysis and Convexity, Memphis, TN, 1997; AMS Special Session on Banach Spaces and Applications, Columbia, MO, 1996; AMS Special Session on Geometric Functional Analysis, Lawrenceville, NJ, 1996; Conference on Banach Space Theory, Kent State University, 1996; Joint Annual Meeting of the American Statistical Association and Institute of Mathematical Statistics, Chicago, IL, 1996; Informal Regional Functional Analysis Seminar, College Station, 1993, 1996; Conference on Infinite Dimensional Geometry, Mathematical Sciences Research Institute, Berkeley, CA, 1996; Wabash Modern Analysis Mini-Conference, Indianapolis, 1995; International Conference on Interactions between Probability, Harmonic Analysis, and Banach Spaces, Columbia, MO, 1994; Second Conference on Function Spaces, Edwardsville, IL, 1994; AMS Special Session on Banach Spaces, College Station, 1993; Workshop on Linear Analysis and Probability, College Station, 1993; International Conference on Approximation and Probability, Santa Barbara, 1993; 9th Southeastern Analysis Meeting, Memphis, 1993; AMS Special Session on Banach Spaces, San Antonio, 1993; Mini-Conference on Banach Spaces, Columbia, Missouri, 1992; Workshop on Banach Spaces, Jerusalem, Israel, 1991; 20th Conference on Stochastic Processes and Applications, Nahariya, Israel, 1991; 19th Conference on Stochastic Processes and Applications, Eisenach, Germany, 1990; International Conference on Probability and Mathematical Statistics, Vilnius, 1989.