CONTACT INFORMATION	University of Southern California Department of Mathematics Kaprielian Hall, office 406h Phone: (+1) 213 255 6724 Email: `dostrovs@usc.edu`
WEBSITE	`ostrodmit.github.io`
OTHER LINKS:	Scholar • GitHub • YouTube

RESEARCH INTERESTS

- ***Optimization theory:***
  - nonconvex minimax problems; acceleration under non-Euclidean geometries.
- ***Learning theory:***
  - fast rates in statistical and online learning; applications of self-concordance.
- ***Mathematical statistics:***
  - high-dimensional, robust, and adaptive estimation and hypotheses testing.
- ***Information theory:***
  - information-theoretic techniques in optimization, statistics, combinatorics.
- ***Signal processing:***
  - sparse recovery; super-resolution; estimation with shift-invariant structure.

CURRENT POSITION

Assistant Professor (RTPC) of Mathematics   since 08/2021
U. of South. California (Department of Mathematics)

PREVIOUS POSITIONS

Postdoctoral Scholar   08/2019–08/2021
U. of South. California (Viterbi School of Engineering; hosted by Meisam Razaviyayn)

ERCIM Alain Bensoussan Postdoctoral Fellow   02/2018–06/2019
INRIA Research Center, Paris (SIERRA team, hosted by Francis Bach)

PhD Student Visitor   12/2016–05/2017
University of Washington, Seattle (Department of Statistics, hosted by Zaid Harchaoui)

DEGREES

PhD, University of Grenoble   10/2014–01/2018
- PhD Thesis: *Adaptive Signal Recovery by Convex Optimization*
  Advisors: Anatoli Juditsky, Zaid Harchaoui

MSc & BSc, Moscow Institute of Physics and Technology   09/2008–07/2014

- MSc Thesis: *Concentration Inequalities for the Exponential Weighting Method*
- BSc Thesis: *Analytical Study of NHDP Link Management Protocol*

Preprints & Working Papers	**Efficient and Near-Optimal Online Portfolio Selection** R. Jézéquel, D. Ostrovskii, P. Gaillard. `arXiv:2209.13932`, 2022. **Nonconvex-Nonconcave Min-Max Optimization with a Small Maximization Domain** D. Ostrovskii, B. Barazandeh, M. Razaviyayn. `arXiv:2110.03950`, 2021. **Near-Optimal Procedures for Model Discrimination with Non-Disclosure Properties** D. Ostrovskii, M. Ndaoud, A. Javanmard, M. Razaviyayn. `arXiv:2012.02901`, 2020. **Efficient Primal-Dual Algorithms for Large-Scale Multiclass Classification** D. Babichev, D. Ostrovskii, F. Bach. `arXiv:1902.03755`, 2019. **Structure-Blind Deconvolution via Convex Optimization** D. Ostrovskii, A. Juditsky. *Available upon request*, 2018.
Book Chapter	**Adaptive Denoising of Signals with Shift-Invariant Structure** D. Ostrovskii, Z. Harchaoui, A. Judistky, A. Nemirovski. `arXiv:1806.04028` *Foundations of Modern Statistics: V. Spokoiny's 60th Anniversary Festscrift*, to appear.
Journal Papers	**Efficient Search of First-Order Nash Equilibria in Nonconvex-Concave Smooth Min-Max Problems** D. Ostrovskii, A. Lowy, M. Razaviyayn. `arXiv:2002.07919` SIAM Journal on Optimization, 31:4, pp. 2508-2538, 2021. **Finite-Sample Analysis of M-Estimators Using Self-Concordance** D. Ostrovskii, F. Bach. `arXiv:1810.06838` Electronic Journal of Statistics, 15:1, pp. 326-391, 2021. **Concentration Inequalities for the Exponential Weighting Method** Y. Golubev, D. Ostrovskii. `hal-01292413` Mathematical Methods of Statistics, 23:1, pp. 20-37, 2014. **A Dynamic Channel Reservation Method for Multimedia Streaming in Wi-Fi Mesh Networks** A. Krasilov, A. Lyakhov, D. Ostrovskii, E. Khorov. Automation and Remote Control, 74:9, pp. 1460-1473, 2013. **Analytical Study of the Quality of Links Established by the Neighbourhood Discovery Protocol** A. Lyakhov, D. Ostrovskii, E. Khorov. Journal of Communications Technology and Electronics, 57:12, pp. 1314-1321, 2012.
Refereed Conference Papers	**Affine Invariant Covariance Estimation for Heavy-Tailed Distributions** D. Ostrovskii, A. Rudi. `arXiv:1902.03086` COLT 2019 **Beyond Least-Squares: Fast Rates for Regularized Empirical Risk Minimization through Self-Concordance** U. Marteau-Ferey, D. Ostrovskii, A. Rudi, F. Bach. `arXiv:1902.03046` COLT 2019

Efficient First-Order Algorithms for Adaptive Signal Denoising
D. Ostrovskii, Z. Harchaoui. `arXiv:1803.11262`
ICML 2018

Structure-Blind Signal Recovery
D. Ostrovskii, Z. Harchaoui, A. Juditsky, A. Nemirovski. `arXiv:1607.05712`
NeurIPS 2016

Adaptive Recovery of Signals by Convex Optimization
Z. Harchaoui, A. Juditsky, A. Nemirovski, D. Ostrovskii. `hal-01250215`
COLT 2015

Dynamic Resource Allocation for MCCA-Based Streaming in Wi-Fi Mesh Networks
E. Khorov, A. Krasilov, A. Lyakhov, D. Ostrovskii.
WiFlex 2013

Analytical Study of Neighborhood Discovery and Link Management in OLSR
E. Khorov, A. Kiryanov, A. Lyakhov, D. Ostrovskii.
IFIP 2012

REVIEWING	**Journals:** Math. Programming (MAPR), SIAM J. on Optimization (SIOPT), Ann. of Statist. (AoS), IEEE Trans. on Inform. Theory (IEEE-IT), Math. of Operations Research (MOR), J. of Machine Learning Research (JMLR), Computational Optim. & Appl. (COAP), Optim. Methods & Software (OMS), J. of Computational & Graphical Statistics (JCGS). **Conferences** (*occasionally*): NeurIPS, ICML, STOC, COLT, ALT.

TEACHING

University of Southern California

2023, Spring:	Analysis of Variance and Regression	9×♟, 3 hrs./wk.
2022, Fall:	Introduction to Mathematical Statistics	15×♟, 3 hrs./wk.
2022, Summer:	Linear Algebra and Linear Differential Equations	12×♟, 6 hrs./wk.
2022, Spring:	Elementary Probability and Statistics	34×♟, 3 hrs./wk.
2021, Fall:	Introduction to Mathematical Statistics	10×♟, 3 hrs./wk.
2019–2021:	Optimization for Machine Learning (invited lectures)	10×♟, 2 hrs./mo.

University of Grenoble (in French)

2017, Spring:	Calculus for Science and Engineering ("Cours-TD")	30×♟, 3 hrs./wk.
2016, Spring:	Calculus for Science and Engineering ("Cours-TD")	30×♟, 3 hrs./wk.
2016, Spring:	Statistical Methods for Biology & Medicine ("TP")	28×♟, 3 hrs./wk.

ORGANIZATION

USC Probability and Statistics Seminar (Fall 2022 – Spring 2023)

Invited speakers (local): Mateo Diaz (Caltech), Misha Belkin (UCSD), Yian Ma (UCSD), Robi Bhattachargee (UCSD), Qiyang Han (Rutgers), Masoud Zargar (USC).

TALKS[1]

2023:

Toulouse School of Economics	`j,z`
Optimization and Statistical Learning 2023, Les Houches	`i`

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[1]Legend: `i` – invited talk, `z` – via Zoom, `p` – poster presentation, `j` – job talk, `s` – session chaired.

2022:

Meeting in Mathematical Statistics, Luminy	i
CNRS AI Rising Talents (Selected among top 3 contenders)	j,z
INFORMS Annual Meeting, Indianapolis	i
Georgia Tech, Stochastic Seminar	i
Georgia Tech, ISyE 8813 (guest lecture)	i,z
Statistical Inference and Convex Optimization (SICO 2022), Grenoble	i,z
University of Southern California, Math. Finance Colloquium	
École Polytechnique, Paris	j,z
INFORMS Optimization Society Conference (IOS 2022), Greenville	s
Johns Hopkins University	j,z
University of Cambridge	j,z

2021:

University of Washington, IFDS seminar	i,z
Johns Hopkins University, AMS seminar	i
Southern California Probability Symposium (SCPS 2022)	i,z
Higher School of Economics, Moscow	i
Universitat Pompeu Fabra, Barcelona	j,z
École Polytechnique Fédérale de Lausanne	j,z
Weierstrass Institute, Berlin	i,z
École Polytechnique, Paris (×2)	j,z

2019-2020:

University of Southern California, Epstein Seminar	
COLT 2019, Phoenix	
Optimization and Statistical Learning 2019, Les Houches	p
Toyota Technological Institute, Chicago	j

2018:

ICML 2018, Stockholm	p
Optimization and Learning workshop, Toulouse	p
CWI-Inria workshop, Paris	
ICML 2018, Stockholm	
CWI seminar, Amsterdam	
SIERRA team seminar, INRIA Paris	
PhD defense, Université Grenoble-Alpes	

2015-2017:

Optimization Without Borders 2017, Les Houches	
NeurIPS 2016, Barcelona	p
Université Grenoble Alpes	
University of Göttingen	j
IRIT, Toulouse	j
ORFE seminar, Princeton	j
University of Washington, Seattle	
PGMO Days 2016, Paris	
COLT 2015, Paris	
StatLearn 2015, Grenoble	

HONORS & AWARDS	NeurIPS 2019 Best Reviewer (awarded to 400 reviewers out of 4500+)
	COLT 2019 Travel Award
	HDSI Postdoctoral Fellowship at UC San Diego, 2019–2021 (offered)
	ERCIM Alain Bensoussan Postdoctoral Fellowship, 2018–2019
	NVIDIA GPU Grant, 2017
	NIPS 2016 Travel Award
	Abramov-Frolov Fund Scholarship, 2009–2011

LANGUAGES

English
- bilingual proficiency

French
- fluent

Russian
- mother tongue

German
- needs reactivation