

CONTACT INFORMATION	University of Southern California Department of Mathematics Kaprielian Hall, office 406h Phone: (+1) 213 255 6724 Email: <a href="mailto:dostrovs@usc.edu">dostrovs@usc.edu</a>	
WEBSITE	<a href="https://ostrodmith.github.io">ostrodmith.github.io</a>	
OTHER LINKS:	Scholar • GitHub • YouTube	
RESEARCH INTERESTS	<ul style="list-style-type: none"> <li>• <b>Optimization theory:</b> <ul style="list-style-type: none"> <li>– minimax &amp; nonconvex problems, acceleration, non-Euclidean geometry.</li> </ul> </li> <li>• <b>Learning theory:</b> <ul style="list-style-type: none"> <li>– fast rates/low regret in statistical/online learning; model misspecification.</li> </ul> </li> <li>• <b>Mathematical statistics:</b> <ul style="list-style-type: none"> <li>– high-dimensional &amp; robust estimation, adaptation, testing, nonparametrics.</li> </ul> </li> <li>• <b>Signal processing:</b> <ul style="list-style-type: none"> <li>– estimation with shift-invariant structure, super-resolution.</li> </ul> </li> </ul>	
CURRENT POSITION	<b>Assistant Professor (RTPC) of Mathematics</b> University of Southern California, Department of Mathematics	since 08/2021
PREVIOUS POSITIONS	<b>Postdoctoral Scholar</b> University of Southern California, Viterbi School of Engineering Host: Meisam Razaviyayn	08/2019–08/2021
	<b>ERCIM Alain Bensoussan Postdoctoral Fellow</b> Inria Paris, France Host: Francis Bach	02/2018–06/2019
	<b>Visiting PhD Student</b> University of Washington, Seattle Host: Zaid Harchaoui	12/2016–05/2017
DEGREES	<b>PhD, University of Grenoble</b> <ul style="list-style-type: none"> <li>• PhD Thesis: <i>Adaptive Signal Recovery by Convex Optimization</i>                Advisors: Anatoli Juditsky &amp; Zaid Harchaoui</li> </ul> <b>MSc &amp; BSc, Moscow Institute of Physics and Technology</b>	10/2014–01/2018
	<ul style="list-style-type: none"> <li>• MSc Thesis: <i>Concentration Inequalities for the Exponential Weighting Method</i>                Advisor: Yuri Golubev</li> <li>• BSc Thesis: <i>Analytical Study of NHDP Link Management Protocol</i></li> </ul>	09/2008–07/2014

PREPRINTS & WORKING PAPERS	<p>Efficient and Near-Optimal Online Portfolio Selection R. Jézéquel, D. Ostrovskii, P. Gaillard. <a href="#">arXiv:2209.13932</a>, 2022.</p> <p>Nonconvex-Nonconcave Min-Max Optimization with a Small Maximization Domain D. Ostrovskii, B. Barazandeh, M. Razaviyayn. <a href="#">arXiv:2110.03950</a>, 2021.</p> <p>Near-Optimal Procedures for Model Discrimination with Non-Disclosure Properties D. Ostrovskii, M. Ndaoud, A. Javanmard, M. Razaviyayn. <a href="#">arXiv:2012.02901</a>, 2020.</p> <p>Efficient Primal-Dual Algorithms for Large-Scale Multiclass Classification D. Babichev, D. Ostrovskii, F. Bach. <a href="#">arXiv:1902.03755</a>, 2019.</p> <p>Structure-Blind Deconvolution via Convex Optimization D. Ostrovskii, A. Juditsky. <i>Available upon request</i>, 2018.</p>
BOOK CHAPTER	<p>Adaptive Denoising of Signals with Shift-Invariant Structure D. Ostrovskii, Z. Harchaoui, A. Juditsky, A. Nemirovski. <a href="#">arXiv:1806.04028</a> <i>Foundations of Modern Statistics: V. Spokoiny's 60th Anniversary Festschrift</i>, to appear.</p>
JOURNAL PUBLICATIONS	<p>Efficient Search of First-Order Nash Equilibria in Nonconvex-Concave Smooth Min-Max Problems D. Ostrovskii, A. Lowy, M. Razaviyayn. <a href="#">arXiv:2002.07919</a> SIAM Journal on Optimization, 31:4, pp. 2508-2538, 2021.</p> <p>Finite-Sample Analysis of M-Estimators Using Self-Concordance D. Ostrovskii, F. Bach. <a href="#">arXiv:1810.06838</a> Electronic Journal of Statistics, 15:1, pp. 326-391, 2021.</p> <p>Concentration Inequalities for the Exponential Weighting Method Y. Golubev, D. Ostrovskii. <a href="#">hal-01292413</a> Mathematical Methods of Statistics, 23:1, pp. 20-37, 2014.</p> <p>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.</p> <p>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.</p>
REFEREED CONFERENCE PUBLICATIONS	<p>Affine Invariant Covariance Estimation for Heavy-Tailed Distributions D. Ostrovskii, A. Rudi. <a href="#">arXiv:1902.03086</a> COLT 2019</p> <p>Beyond Least-Squares: Fast Rates for Regularized Empirical Risk Minimization through Self-Concordance U. Marteau-Ferey, D. Ostrovskii, A. Rudi, F. Bach. <a href="#">arXiv:1902.03046</a> COLT 2019</p>

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 Mathematical Programming, SIAM Journal on Optimization, Annals of Statistics,  
Journal of Machine Learning Research, NeurIPS, ICML, COLT, ALT, STOC

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.

TALKS <sup>1</sup>	TBA: Optimization and Statistical Learning workshop, Les Houches	i
	TBA: Meeting in Mathematical Statistics, Luminy	i

2022

CNRS AI Rising Talents	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

<sup>1</sup>Legend: i – invited talk, z – via Zoom, p – poster presentation, j – job talk, s – session chaired.

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

University of Southern California, Epstein Seminar	
COLT 2019, Phoenix	
Optimization and Statistical Learning workshop, 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 seminar, Inria, Paris	
PhD defense, University of Grenoble	

#### 2017 & before

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, 5 years of living in France

Russian

- mother tongue

German

- B1, needs reactivation