

Aleksandr Beznosikov

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EDUCATION

Moscow Institute of Physics and Technology

MSc in Applied Mathematics and Physics

Moscow, Russia

Sep 2020 – Present

Moscow Institute of Physics and Technology

BSc in Applied Mathematics and Physics

Moscow, Russia

Sep 2016 – Aug 2020

- GPA – 3.99/4, 4.99/5, 9.35/10

RESEARCH INTERESTS

- Stochastic Optimization
- Distributed Optimization
- Machine Learning
- Federated Learning

PUBLICATIONS

- A. Beznosikov, V. Samokhin, A. Gasnikov. **Local SGD for Saddle-Point Problems**, arXiv preprint arXiv:2010.13112 (October 2020)
- A. Sadiev, A. Beznosikov, P. Dvurechensky, A. Gasnikov. **Zeroth-Order Algorithms for Smooth Saddle-Point Problems**, arXiv preprint arXiv:2009.09908 (September 2020)
- A. Bazarova, A. Beznosikov, A. Gasnikov. **Linearly Convergent Gradient-Free Methods for Minimization of Symmetric Parabolic Approximation**, arXiv preprint arXiv:2009.04906 (September 2020)
- A. Beznosikov, A. Sadiev, A. Gasnikov. **Gradient-Free Methods for Saddle-Point Problem**, published in Communications in Computer and Information Science (CCIS) series, arXiv preprint arXiv:2005.05913 (May 2020)
- A. Beznosikov, S. Horváth, P. Richtárik, M. Safaryan. **On Biased Compression for Distributed Learning**, arXiv preprint arXiv:2002.12410 (February 2020)
- A. Beznosikov, E. Gorbunov, A. Gasnikov. **Derivative-Free Method For Decentralized Distributed Non-Smooth Optimization**, published in IFAC-PapersOnLine, arXiv preprint arXiv:1911.10645 (November 2019)

CONFERENCE TALKS

- 15 July 2020, Mathematical Optimization Theory and Operations Research (MOTOR 2020), Novosibirsk, Russia (online), A. Beznosikov, A. Sadiev, A. Gasnikov "Gradient-Free Methods for Saddle-Point Problem"
- 12 July 2020, 21st IFAC World Congress 2020, Berlin, Germany (online), A. Beznosikov, E. Gorbunov, A. Gasnikov "Derivative-Free Method For Decentralized Distributed Non-Smooth Optimization"
- 2 December 2019, Quasilinear Equations, Inverse Problems and Their Applications 2019, Moscow, Russia, A. Beznosikov, E. Gorbunov, A. Gasnikov "A Derivative Free Method for Distributed Optimization"

- 23 November 2019, The 62th MIPT Conference, Moscow, Russia, A. Beznosikov, E. Gorbunov, A. Gasnikov "Derivative-Free Sliding For Distributed Optimization", **winner**
- 25 November 2017, The 60th MIPT Conference, Moscow, Russia, A. Beznosikov, K. Teimurazov "The problem of creating models of the electronic queue and student accounting system and their application in practice", **winner**

RESEARCH VISITS

- 2 August – 23 August 2020, Sirius University of Science and Technology, Sochi, Russia
- 9 January – 12 February 2020, Visual Computing Center, KAUST, Thuwal, Saudi Arabia (worked with Peter Richtárik)

TEACHING

Moscow Institute of Physics and Technology

Teaching assistant at the Department of Mathematical Fundamentals of Control

Moscow, Russia

Sep 2017 - Present

- Fall 2020: Probability theory
- Fall 2020: Discrete analysis
- Spring 2020: Stochastic process
- Fall 2019: Probability theory
- Fall 2019: Discrete analysis
- Fall 2018: Discrete analysis
- Fall 2018: Databases
- Fall 2017: Databases

Summer school in Physics and Mathematics Lyceum

Director, Head of teaching staff

Syktyvkar, Russia

Aug 2018, Aug 2019

- Summer school for gifted children from provincial towns and villages

COMPUTER SKILLS

- Programming Language: **Python, C#, C++, C, SQL**
- **L^AT_EX**
- Operating Systems: **Microsoft Windows, Linux, Mac OSX**

LANGUAGE

- **Russian:** [Mothertongue]
- **English:** [Upper Intermediate]

INTERESTS

- **Basketball:** Candidate Master of Sports in Russia

SCHOLARSHIPS, HONORS AND AWARDS

University

2016 - Present

- 2020 Gazprom Bank personal scholarship
- 2020 Moscow region government scholarship
- 2020 Personal merit scholarship at MIPT
- 2018-2019 Increased State Academic Scholarship for 4 year bachelor and master students at MIPT
- 2018-2019 Author of problems and organizer of the student olympiad in discrete mathematics
- 2017: First Prize at MIPT's Team Mathematical Tournament
- 2017-2019: Abramov scholarship for 1-3 year bachelor students with the best grades at MIPT

School

2016 and earlier

- 2015: Silver medal in IEPHO (International Experimental Physics Olympiad)
- 2014-2015: Russian President's Scholarship, for high school student
- 2015: Prize-Winner, All-Russian School Physics Olympiad, Final Round
- 2014: Prize-Winner, All-Russian School Physics Olympiad, Final Round
- 2014-2015: Russian President's Scholarship, for high school student
- 2015-2016: Winner, All-Russian School Programming Olympiad, Region Round
- 2014-2016: Winner, All-Russian School Physics Olympiad, Region Round
- 2014-2016: Winner, All-Russian School Maths Olympiad, Region Round