

# Sergey DOVGAL

## PERSONAL DATA

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PLACE AND DATE OF BIRTH: Belarus | 06 January 1993  
PHONE: +33 6 17 57 58 98  
EMAIL: [dovgal@lipn.univ-paris13.fr](mailto:dovgal@lipn.univ-paris13.fr)  
PHD THESIS: LIPN Université Paris 13, 99 avenue Jean-Baptiste Clément, 93430 Villetaneuse

## EDUCATION

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- 2016–Present PhD Thesis. Laboratoire Informatique Paris Nord,  
**Université Paris 13, 99 avenue Jean-Baptiste Clément, 93430 Villetaneuse**  
Advisor: Prof. Olivier BODINY  
Co-Advisor: Prof. Vldy RAVELOMANANA, IRIF, Université Paris 7,  
8 Place Aurélie Nemours, 75013 Paris
- April–June 2016 M2 internship, Laboratoire d'Informatique Algorithmique: Fondements et Applications  
**LIAFA, Université Paris 7, 8 Place Aurélie Nemours, 75013 Paris**  
Topic: Graphs with degree constraints  
Advisor: Prof. Vldy RAVELOMANANA
- 2014–2016 Master Degree with distinction. Department of Control and Applied Mathematics,  
**Moscow Institute of Physics and Technologies**  
Thesis: “Fisher and Wilks Theorems for Local Log-Density Estimation”  
Advisor: Prof. Vladimir SPOKOINY
- 2010–2014 Bachelor Degree. Department of Control and Applied Mathematics,  
**Moscow Institute of Physics and Technologies**  
Thesis: “Bootstrap Credible Sets for Local Maximum Likelihood Approach”  
Advisors: Prof. Vladimir SPOKOINY, Evgeny BURNAEV

## RESEARCH

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- 2017 Work in progress. Olivier Bodini, Sergey Dovgal: «Fast tuning of Multivariate Boltzmann Samplers and combinatorial Maximum Likelihood Estimator»
- 2017 Work in progress. Maciej Bendkowski, Olivier Bodini, Sergey Dovgal:  
«Statistical properties of closed lambda-terms»
- 2017 ArXiv Preprint. Sergey Dovgal, Vldy Ravelomanana: «Shifting the Phase Transition Threshold for Random Graphs and 2-SAT using Degree Constraints». <https://arxiv.org/abs/1704.06683>
- 2016 ArXiv Preprint. Sergey Dovgal: «Towards Model Selection for Local Log-Density Estimation. Fisher and Wilks-type theorems». <https://arxiv.org/abs/1607.00806>
- 2015 ITAS Conference. Sergey Dovgal, Vladimir Spokoiny: «Fisher and Wilks Theorems for Likelihood-Based Density Estimation». <http://itas2015.iitp.ru/en/statistics.html>

## HONORS & AWARDS

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- JUL. 2009, JUL. 2010 **International Mathematical Olympiad** – [Silver and Bronze Medals](#)  
APRIL 2011 **Student Olympiad on Discrete Mathematics at MIPT** – [Winner's Certificate](#)  
FEBRUARY 2012 **Ivanilov Sholarship** – Faculty Scholarship for Distinguished Students  
MAY 2012 **All-Russian Student Mathematical Olympiad at MIPT** – [3-rd place](#).  
MARCH 2013, 2014 **Intercollegiate Programming Olympiad in Vologda** – [4-th](#) and [8-th](#) place.

## THEMATIC WORKSHOPS AND RESEARCH SCHOOLS ATTENDED

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- 2017 Barcelona, Discrete Random Structures and Beyond
- 2017 Goteburg, Computational Logic and Applications
- 2017 Marseille, Journées ALEA 2017
- 2017 Bordeaux, Journées Combinatoires 2017
- 2016 Marseille, Mathematical Statistics and Inverse Problems
- 2015 Sochi, Summer School «[Information Technologies and Systems](#)»
- 2015 Sylt, Spring School «[Structural Inference in Statistics](#)»
- 2013 Kazan, Summer School on High-Performance Computing with Applications in Biology and Medicine, [Innopolis University](#), [MIPT](#)
- 2012 Dubna, Summer School «[Contemporary Mathematics](#)»

## TEACHING. MAJOR EDUCATIONAL PROJECTS.

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- 2011-2015 **LaTeX Lecture Notes for various courses (Complete Course Notes):**  
Differential Equations (two-semester), Quantum Mechanics (two-semester),  
Advanced Topics on Discrete Analysis, Foundations of Mathematical Statistics,  
Foundations of Ergodic Theory.
- 2012-2015 School-Lyceum N5, Dolgoprudny. [Mathematical Olympiads Corner](#)
- FALL 2016 MIPT, [Advanced Course on Enumerative Combinatorics](#)
- FALL 2014 MIPT, [Seminars in Discrete Mathematics](#)
- FALL 2014 MIPT, [Advanced Topics in Mathematical and Functional Analysis](#)
- SPRING 2015 MIPT, [Seminars in Higher Algebra and Coding Theory](#)
- FALL 2015 MIPT, [Seminars in Discrete Mathematics](#)
- FALL 2015 MIPT, [Seminars in Convex Optimization](#)
- 2012-2014 MIPT, Course in Music Theory and Acoustics [\[blog\]](#) [\[video\]](#)
- 2013-2014 [Summer Ecological School, Mathematical Department.](#)  
Mini-courses (4 lectures each) for schoolchildren.  
Generating Functions with Application in Combinatorics.  
Mathematical Foundations of Cryptography and Computation Complexity.

## LANGUAGES

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- RUSSIAN: Native
- ENGLISH: Intermediate (IELTS 7: Speaking 6, Reading 9, Writing 6.5, Listening 6.5)
- FRENCH, GERMAN: Basic.