

Ilya Losev

Email: il320@cam.ac.uk

Education

University of Cambridge PhD in Mathematics of Information	October 2021 – Present <i>Supervisor: James Norris</i>
St. Petersburg State University Master in Mathematics; GPA: 5/5	September 2019 – June 2021 <i>Supervisor: Yurii Belov</i>
University of Geneva, SwissMAP Master Class Master in Mathematical Physics; GPA: 5.9/6	September 2019 – August 2020 <i>Supervisor: Stanislav Smirnov</i>
St. Petersburg State University Bachelor in Mathematics; GPA: 5/5	September 2015 – June 2019 <i>Supervisor: Yurii Belov</i>

Job experience

Research Assistant Chebyshev Laboratory, St. Petersburg State University	November 2017 – September 2021
Organizer of St. Petersburg Math Olympiad Mathematics Olympiad Committee, St. Petersburg	September 2016 – May 2018
Teaching Assistant Physics and Mathematics Lyceum 239, St. Petersburg	September 2015 – August 2019

Research interests

My research is mainly focused on problems related to probability theory, statistical physics and quantum field theories. I am studying probabilistic models that come from mathematical physics, and I am interested in questions related to the description of their large-scale or large-time (for stochastic processes) behaviour.

Research papers

Large Deviations of the Schwarzian Field Theory; *arXiv:2406.17069*, 2024;

Probabilistic derivation of the correlation functions of the Schwarzian Field Theory; *arXiv:2406.17071*, 2024;

Probabilistic Definition of the Schwarzian Field Theory; (with R. Bauerschmidt and P. Wildemann), *arXiv:2406.17068*, 2024;

How long are the arms in DBM?; (with S. Smirnov), *arXiv:2307.14931*, 2023;

Jacobi matrices with lacunary spectrum; *Journal of Mathematical Analysis and Applications*, Volume 503, Issue 1, 2021.

Awards

Edouard Gans Prize 2020

Best Master's Thesis in Mathematics, University of Geneva

International Mathematics Competition, Gold Medal 2017

University Level Competition

Research talks and posters

Sapienza Probability Seminar Rome, Italy; March 2024
How long are the arms in DBM? *Seminar Talk*

Cambridge Probability Seminar Cambridge, UK; October 2023
How long are the arms in DBM? *Seminar Talk*

Phase Transitions and Correlated Random Processes Cambridge, UK; May 2023
Schwarzian Field Theory *Short Talk*

Probability and Mathematical Physics Conference Helsinki, Finland; July 2022
How long are the arms in DBM? *Poster*

7th SwissMAP General Meeting Gstaad, Switzerland; August 2020
How long are the arms in DBM? *Poster*

SwissMAP Site Visit Online; June 2020
How long are the arms in DBM? *Poster*

**Emergent Trends in Complex
Function Theory Workshop**
Jacobi matrices with lacunary spectrum

Barcelona, Spain; October 2019
Short Talk

**Spectral Function Theory
International Spring School**
Jacobi matrices with lacunary spectrum

St. Petersburg, Russia; April 2019
Short Talk

Other research visits

Oberwolfach Arbeitsgemeinschaft
QFT and Stochastic PDEs

Oberwolfach, Germany; December 2023
Reading Group

SwissMAP Research Station
Short Research Stay

Les Diablerets, Switzerland; August 2023
Research Visit