

Nikita Safonkin

Last updated	January 2026
Date of birth	28 September 1996
Place of birth	Russia, Moscow
e-mail	safonkin.nik@gmail.com
Personal website	https://www.nikita-safonkin.com
Employment	
November 2023 – present	Postdoctoral researcher at Leipzig University
2020 – 2022	Research assistant at HSE – Skoltech International Laboratory of Representation Theory and Mathematical Physics.
Education	
2013 – 2017	Lomonosov Moscow State University, Faculty of Physics, Department of Mathematics, B.Sc. in Physics
2017 – 2019	National Research University Higher School of Economics, Faculty of Mathematics, M.Sc.
2018 – 2019	Skolkovo Institute of Science and Technology, M.Sc.
2019 – 2023	Skolkovo Institute of Science and Technology
June – October 2023	University of Reims Champagne-Ardenne, Ph.D.
PhD degree	
2023	<i>Harmonic functions on branching graphs</i>
Advisor	Grigori Olshanski
Papers	
2025	N.Safonkin, "Coupled double Poisson brackets", In preparation.
2025	N.Safonkin, "What is a double star-product?", arXiv:2506.00699 .
2023	G.Olshanski, N.Safonkin, "Double Poisson brackets and involutive representation spaces", Letters in Mathematical Physics 114, 33, arXiv:2310.01086 .
2023	G.Olshanski, N.Safonkin, "Remarks on Yangian-type algebras and double Poisson brackets", Functional Analysis and Its Applications 57, 326–336, arXiv:2308.13325 .
2022	P. Nikitin, N. Safonkin, "Semifinite harmonic functions on the direct product of graded graphs", Zapiski Nauchnykh Seminarov POMI, Volume 517, 125–150, arXiv:2209.05901 .
2022	N.Safonkin, "Semifinite harmonic functions on the zigzag graph", Functional Analysis and Its Applications, 56:3, 52–74, link and arXiv:2110.01508 .
2022	N.Safonkin, "Semifinite Harmonic Functions on Branching Graphs", Journal of Mathematical Sciences (New York), 261, 669–686, link and arXiv:2108.07850 .
2021	N.Safonkin, "Semifinite Harmonic Functions on the Gnedin-Kingman Graph", Journal of Mathematical Sciences (New York) 255, 132–142, link and arXiv:2103.02257 .
2018	P. Bibikov, N. Safonkin, "Classification of Certain Class of Ordinary Differential Equations of the First Order", Russian Mathematics 62, link .
Research visits	
March – June 2023	Weizmann Institute of Science, Rehovot, Israel.
December 2021	Leonhard Euler International Mathematical Institute in Saint Petersburg.
Awards	
2021	IUM-Simons foundation scholarship.
Teaching	
2021	Teaching assistant at the Independent University of Moscow.
2022	Algebra-1 class tutor at the Higher School of Economics, Faculty of Mathematics.
Talks	

- 2025 *Deformation quantization of double Poisson algebras*, BIMSIA Integrable Systems Seminar, [link](#).
- 2025 *What is a double star-product?*, Deformation quantization and quantum groups seminar, The Independent University of Moscow [link](#).
- 2025 *What is a double star-product?*, X International Workshop on Non-Associative Algebras in Dijon [link](#).
- 2025 *What is a double star-product?*, Séminaire Physique mathématique ICJ, Institut Camille Jordan, [link](#).
- 2025 *What is a double star-product?*, European Non-Associative Algebra Seminar, [link](#).
- 2024 *Double Poisson brackets and involutive representation spaces*, Geometry seminar, Max Planck Institute for Mathematics in the Sciences, Leipzig, [link](#).
- 2024 *Double Poisson brackets and involutive representation spaces*, VIII International Workshop on Non-Associative Algebras in Linköping, [link](#).
- 2023 *Yangian-type algebras and double Poisson brackets*, October 3, Deformation quantization and quantum groups seminar, IUM, [link](#).
- 2023 *Yangian-type algebras and double Poisson brackets*, September 26, BIMSIA Integrable Systems Seminar, [link](#).
- 2023 *Yangian-type algebras and double Poisson brackets*, July 11, University of Reims Champagne-Ardenne, [link](#).
- 2023 *Semifinite harmonic functions on the zigzag graph*, Les Probab du vendredi, LPSM, Sorbonne University, January 27, [link](#).
- 2022 *Graded graphs and related topics*, Working Seminar on Mathematical Physics of HSE and Skoltech CAS, September 21, [link](#).
- 2021 *Wassermann's method for the Young and zigzag graphs*, St. Petersburg Seminar on Representation Theory and Dynamical Systems, PDMI, December 22, [link](#).
- 2021 *Semifinite harmonic functions on the Young and zigzag graphs*, St. Petersburg Seminar on Representation Theory and Dynamical Systems, PDMI, December 8, [link](#).
- 2021 Several talks at [Representations and Probability seminar](#):
- *Semifinite harmonic functions*, March 29, [video](#).
 - *Harmonic functions on the zigzag graph*, March 22, [video](#).
 - *The zigzag graph and the path space of a branching graph*, March 15, [video](#).
 - *Harmonic functions on the Gnedin-Kingman graph and Kerov's construction*, March 1, [video](#).
 - *Monomial quasisymmetric functions and the Gnedin-Kingman graph*, February 18, [video](#).
 - *Harmonic functions on the Pascal, Kingman and Young graphs 2*, February 11, [video](#).
 - *Harmonic functions on the Pascal, Kingman and Young graphs 1*, February 4, [video](#).
- 2021 *The algebra of quasisymmetric functions and the Gnedin-Kingman graph*, [Seminar on Lie algebras and applications](#), March 2.
- 2021 *Macdonald polynomials, Kerov's construction, and Matveev's theorem*, [Working Seminar on Mathematical Physics of HSE University and Skoltech Center for Advanced Studies](#), February 24, [video](#).

- 2021 *Harmonic functions on the Kingman and Young graphs*, [Working Seminar on Mathematical Physics of HSE University and Skoltech Center for Advanced Studies](#), February 10, [video](#).
- 2020 *Semifinite harmonic functions on the Gnedin-Kingman graph*, Central and invariant measures and applications, August 17-21, 2020, Euler International Mathematical Institute, St. Petersburg, Russia.
- 2019 *Unitary representations of the quantized algebra $U_q(\mathfrak{u}(m, n))$* , Research Seminar of the Master's Program in Mathematics and Mathematical Physics at the Higher School of Economics.