Rodion Zaytsev

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EDUCATION

2024-PRESENT	California Institute of Technology	Ph.D. in Mathematics
2022-24	Faculty of Mathematics, Higher School of Economics (HSE)	M.Sc. in Mathematics **GPA 9.82/10.00, top 3 / 42**
2022-24	Skolkovo Institute of Science and Technology	Mathematical and Theoretical Physics
2021-23	Yandex School of Data Analysis **Acceptance rate: 5%**	Machine Learning Developer M.Sc. equivalent additional education **GPA 4.7/5.0**
2017-21	Moscow Institute of Physics and Technology (with transfer credits from HSE)	B.Sc. in Applied Mathematics and Informatics

INTERNSHIPS

SUMMER 2023	École Polytechnique Topic: Inverse Scattering Supervisor: R.G. Novikov	Summer Research Student ○ Derived formulas for inverting band-limited Hankel transform ○ Implemented code for numerical examples
SUMMER 2021	Deutsches Elektronen-Synchrotron (DESY) Topic: Interferometric Mirror Tracking System Supervisor: M. Lyubomirskiy	Summer Research Student ○ Developed & implemented a method for X-ray scanning ○ Presented the results at the faculty seminar

PAPERS

IN PROGRESS	Rodion Zaytsev "Commutation Relations in Yangian-type Algebras"	current draft
IN PROGRESS	Mikhail Isaev, Roman G. Novikov, Rodion Zaytsev "PSWF-Radon approach to reconstruction from band-limited Hankel transform"	To be submitted to *Inverse Problems* abstract and slides
2023	Alexey Kanel-Belov, Rodion Zaytsev "Insolvability of $x^x = a$ in elementary functions"	arxiv preprint
2020	A. Kanel-Belov, A. Malistov and R. Zaytsev "Solvability of equations in elementary functions"	*Journal of Knot Theory & Its Ramifications,* 29(2) arxiv preprint

Honors & Awards

2023-24	Tinkoff Scholarship (awarded for academic merit) **1.5% acceptance**	25'000₽ (ca. 250$) monthly
Apr. 2023	"I am a professional" National Olympiad, Artificial Intelligence	Bronze Medalist (Absolute 3rd place), **top 0.3%** 150'000₽ (ca. 1'500$) award
Aug. 2019, Aug. 2021	International Mathematics Competition for University Students	First prize

Talks

Dec. 2023	Quasilinear Equations, Inverse Problems and Their Applications (QIPA 2023) International Conference	PSWF-Radon approach to reconstruction from band-limited Hankel transform
Oct. 2023	Skoltech, Moduli Space of Curves Seminar Presentation	Modular Forms and ψ_1 on $\overline{\mathcal{M}}_{1,1}$
Oct. 2023	HSE, Representation Theory Seminar Presentation	Path Integral. Correlation Functions in Klein-Gordon and φ^4 Theories
Aug. 2023	Skoltech Center for Advanced Studies Summer School, Presentation	Commutation relations in Yangian-type algebras
Apr. 2021	Moscow State University Lomonosov 2021 Conference, Presentation	Solvability of equations in elementary functions

Teaching

Fall 2023	HSE teaching assistant Geometric Introduction to Algebraic Geometry	Marking weekly assignments of ca. 15 students
2018-present	Online lessons	Helping students prepare for exams in math

Languages

Russian	mother tongue
English	fluent
Spanish	advanced
French	advanced
German	upper-intermediate