

Curriculum Vitæ

Yaroslav Igorevich Drachov

Personal

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| Date of Birth | May 18, 2001 |
| Place of Birth | Minsk, Belarus |
| Nationality | Belarus |
| E-mail | <code>drachov.yai@phystech.edu</code> |

Education

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| 2024–present | PhD student in Theoretical Physics, GPA 4.0, Moscow Institute of Physics and Technology, Russia |
| 2022–2024 | Master of Science in Applied Mathematics & Physics, GPA 4.0 Moscow Institute of Physics and Technology, Russia |
| 2018–2022 | Bachelor of Science in Applied Mathematics & Physics, GPA 3.5 Moscow Institute of Physics and Technology, Russia |
| 2016–2018 | Specialized Mathematics & Physics secondary school education Lyceum of Belarusian National Technical University, Belarus |

Professional Experience

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| 2025–present | Junior Researcher at Laboratory of Mathematical and Theoretical Physics Moscow Institute of Physics and Technology, Russia |
| 2023–2025 | Engineer at Laboratory of Mathematical and Theoretical Physics Moscow Institute of Physics and Technology, Russia |
| 2022–present | Course instructor on Matrix Models and Integrable Hierarchies Moscow Institute of Physics and Technology, Russia |

Honors and Awards

- 2024 Master's degree with highest honors ("Red Diploma")
- 2023 Increased State Academic Scholarship for achievements in scientific research activities
- 2023 Grant by Russian Scientific Fund for a research project "Superintegrability of matrix models, infinite-dimensional symmetry algebras and integrable systems" led by A. Mironov
- 2023 Grant by BASIS Fund for a research project "Integrable properties in quantum systems and their applications in combinatorics and representation theory" led by A. Sleptsov
- 2022 State Scholarship for Master's studies in Russia for foreign students
- 2018 State Scholarship for Bachelor's studies in Russia for foreign students
- 2018 Silver Medal "For special achievements in learning"
- 2018 3rd degree Diploma on Belarusian Republican Physics Olympiad
- 2018 2nd degree Diploma on Belarusian Young Physicists' Tournament
- 2017 3rd degree Diploma on Belarusian Young Physicists' Tournament

List of Publications

- [1] Ya. Drachov, A. Mironov, and A. Popolitov. " $W_{1+\infty}$ and \widetilde{W} Algebras, and Ward Identities". In: *Phys. Lett. B* 849 (2024), p. 138426. DOI: 10.1016/j.physletb.2023.138426. arXiv: 2311.17738 [hep-th].
- [2] Yaroslav Drachov. "Generalized \widetilde{W} Algebras". In: *Eur. Phys. J. C* 84.10 (2024), p. 1078. DOI: 10.1140/epjc/s10052-024-13382-5. arXiv: 2406.13624 [hep-th].
- [3] Yaroslav Drachov and Aleksandr Zhabin. "Genus Expansion of Matrix Models and \hbar Expansion of *BKP* Hierarchy". In: *Eur. Phys. J. C* 83.5 (2023), p. 437. DOI: 10.1140/epjc/s10052-023-11617-5. arXiv: 2302.03949 [hep-th].

Conferences, schools and workshops

- Oct. 2025 School "Invariance and integrability"
Sirius, Russia
- Jul. 2025 III V. A. Rubakov School on Elementary Particle Physics
and Cosmology
Sarov, Russia
- May 2025 Summer School on Fundamental Physics and Mathematics
Krasnaya Polyana, Russia
- Sep. 2024 Information Technologies and Systems,
Moscow, Russia
- Sep. 2024 Integrable systems and quantum theory
Saint-Petersburg, Russia
- Aug. 2024 Supersymmetries and Quantum Symmetries – SQS'24
Dubna, Russia
- Jul. 2024 International School “Advanced Methods of
Modern Theoretical Physics: Integrable and Stochastic Systems”
Dubna, Russia
- Jul. 2024 XXIV Baikal International Summer School on Physics of
Elementary Particles and Astrophysics
Bol'shie Koty, Russia
- May 2024 XXII International seminar on high-energy physics “QUARKS–2024”
Pereslavl-Zalessky, Russia
- Apr. 2024 School on Fundamental Physics and Mathematics
Dagestan, Russia
- Mar. 2024 Moscow International School of Physics,
Voronovo, Russia
- Feb. 2024 Problems of Modern Mathematical Physics,
Dubna, Russia
- Aug. 2023 Summer School on Fundamental Physics and Mathematics
Dombay, Russia
- Aug. 2022 Summer School on Mathematical and Theoretical Physics
Tsey, Russia