

# Curriculum Vitæ

Yaroslav Igorevich Drachov

## Personal

Date of Birth May 18, 2001  
Place of Birth Minsk, Belarus  
Nationality Belarus  
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## Education

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

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 3<sup>rd</sup> degree Diploma on Belarusian Republican Physics Olympiad

2018 2<sup>nd</sup> degree Diploma on Belarusian Young Physicists' Tournament

2017 3<sup>rd</sup> 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