

# Artem Semidetnov

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## Education

<b>BS</b>	<b>Saint-Petersburg State University</b> , Mathematics	2021 – 2025
<b>BS</b>	<b>Neapolis University Of Pafos</b> , Applied Computer Science JetBrains Program	2022 – 2024

## Publications

<b>On the geometry of free nilpotent groups</b> <a href="#">↗</a>	May 2021
<b>Artem Semidetnov</b> , Ruslan Magdiev	
<a href="https://doi.org/10.48550/arXiv.2106.00095">https://doi.org/10.48550/arXiv.2106.00095</a> <a href="#">↗</a>	

## Awards and Scholarships

Scholarship by "Rodnye Goroda" (a social investment program of PJSC "Gazprom нефт"), 2023-2024  
 JetBrains Scholarship in Neapolis University

## Teaching Experience

<b>Sirius educational center</b> , Teaching assistant on the course " <a href="#">Groups of intermediate growth</a> " <a href="#">↗</a>	Sochi, Russia Apr 2024 – May 2024
<b>Laboratory for continuous mathematical education</b> , mathematics teacher for gifted students. I was teaching introduction to group theory.	2021 – 2023
<b>Mathematics and Computer Science faculty program for prospective students</b> , Teaching assistant on the course "Braid and knot theory"	June 2023

## Selected Talks

<b>On the geometry of free nilpotent groups</b>	Novosibirsk, Russia 2021
• Siberian summer conference	
<b>"On the Poisson boundary of lamplighter groups"</b> <a href="#">↗</a>	Saint Petersburg
• St. Petersburg Seminar on Representation Theory and Dynamical Systems	

## Work Experience

<b>JetBrains</b> , Research Intern in HoTT and Dependent Types Lab	Pafos, Cyprus June 2024 – Sept 2024
<ul style="list-style-type: none"> <li>I was developing the official library in the Arend language. I formalized different results in algebra and homotopy type theory, including following.</li> <li>Formalized Eckmann-Hilton argument, Eilenberg-MacLane spaces, Homologies of types.</li> <li>Formalized automorphisms of groups, Schur's Lemma, Maschke's Lemma, Group actions characterizations. (Some of these results are in the <a href="#">1.10 release</a> <a href="#">↗</a>)</li> </ul>	
<b>IPONWEB (acquired by Criteo)</b> , Machine Learning Intern	Pafos, Cyprus May 2023 – Sept 2023
<ul style="list-style-type: none"> <li>Criteo has a ML tool that analyzes sites and produces word-2-vec representations. In IPONWEB I was trying to reverse-engineer the behaviour of this tool and analyze its possible applications.</li> </ul>	

## Miscellaneous

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- Finalist of 2020 Intel ISEF
- Intel ISEF alumni
- Winner of 2019 Baltic SEF, PDMI special prize in 2019 Baltic SEF
- 3rd team place in 2019 [International Tournament of Young Mathematicians](#) in Barcelona, Spain
- Organizer of the [Euler International Mathematical Institute's functional analysis seminar](#)
- English level C1 (IELTS 8.0/9)
- Invited judge in Saint-Petersburg Tournament of Young Mathematicians (since 2021)
- Created mathematical problem for 2024 International Tournament of Young Mathematicians ([10th in here](#)).