

Igor Medvedev

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Education

Princeton University , Princeton, NJ PhD in Mathematics	2023-
Cambridge University, Trinity College , Cambridge, UK MAst in Pure Mathematics (Part III)	2022-2023
Princeton University , Princeton, NJ A.B. degree with Highest Honors in Mathematics, GPA 3.99 out of 4.00	2018-2022

Mathematics projects

PhD Thesis advised by Prof. Mihalis Dafermos – PhD thesis related to stability of black hole spacetimes, <i>in progress</i>	Fall 2023-
Part III Essay advised by Prof. Mihalis Dafermos	Spring 2023
Undergraduate Thesis advised by Prof. Mihalis Dafermos	Fall 2021-Spring 2022
Undergraduate Independent work advised by Prof. Yakov Shlapentokh-Rothman	Spring 2021

Talks

Gran Sasso Science Institute – presented a new proof of stability of Minkowski space using the r^p method	June 2025
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Conferences

Simons Math Summer Workshop , Stony Brook – Partial Differential Equations of Classical Physics	2025
Simons Workshop , Stony Brook – Hyperbolic and Dispersive Equations on Curved Geometries: Connections to Physics and General Relativity	2025
Symmetries and dynamics of extremal black holes , Princeton	2024
Nonlinear Aspects of General Relativity , Princeton	2023
Clay Research Conference and Workshops – participated in the Stability and Instability in General Relativity Workshop	2022

Work Experience

Radix Trading <i>Quantitative Research Intern</i> – Researched and developed systematic trading signals for a range of asset classes, including futures, equities, and cryptocurrencies. Developed criteria to predict performance of the trading signals. – Mentored by Kenan Diab.	Summer 2021
Five Rings Capital <i>Trading Intern</i> – Used Python to analyzed how delta hedging impacts the price of the underlying in options markets. – Participated in mock trading, intro to finance lectures. Mentored by Harrison Li.	Summer 2020

Awards & Honors

Trinity Studentship in Mathematics , Trinity College, Cambridge	2022
Trinity Overseas Bursary , Trinity College, Cambridge	
Sigma Xi Book Award for Outstanding Research , Princeton Math Department	
– "awarded for outstanding research accomplishments in mathematics"	
Inducted into Sigma Xi , Princeton University	
Inducted into Phi Beta Kappa , Princeton University	2021
– the top 2% of Princeton's graduating class is inducted into PBK during the fall semester	
Shapiro Prize for Academic Excellence , Princeton University	2019 and 2020
– for "outstanding academic achievement by Princeton undergraduates in their first or second years"	
Allen G. Shenstone Prize in Physics , Princeton Physics Department	2019
– "for excellence in course work and promise in independent research"	

Math competitions

International Mathematical Olympiad (IMO) silver medal	2016-2018
– silver medal in 2018 , placed 87th out of 594	
– bronze medal in 2017 , placed 188th out of 615	
– bronze medal in 2016 , placed 206th out of 502	
International Physics Olympiad (IPhO)	2018
– silver medal in 2018 , placed 69th out of 412	

Service

Graduate Student Committee , Princeton	2023-
Graduate Student Seminar Organizer , Princeton	2024-2025

Skills

Computing: C++ (intermediate), Python (numpy, pandas, matplotlib - intermediate), Java (intro), L^AT_EX