

Igor Medvedev

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Education

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

Mathematics projects

PhD Thesis advised by Prof. Mihalis Dafermos	Fall 2023-
– PhD thesis related to stability of black hole spacetimes, <i>in progress</i>	
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	June 2025
– presented a new proof of stability of Minkowski space using the r^p method	

Conferences

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

Work Experience

Radix Trading Quantitative Research Intern	Summer 2021
– 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.	
Five Rings Capital Trading Intern	Summer 2020
– 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.	

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