

Runqing Zhuo

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Education

Nanjing University B.S. in Mathematics Overall GPA: 4.6/5.0 Rank: 2/125	2022–2026
University of Michigan Visiting Student in Mathematics	Fall 2025
Beijing International Center for Mathematical Research (BICMR) Student of Enhanced Program for Graduate Study (2026)	Spring 2026

Research Interests

Analysis, Harmonic Analysis, Partial Differential Equations, Dynamical Systems

Research and Reading Experience

Independent Reading Course <i>Advisor: Prof. Xiao Ma, University of Michigan</i> Topics including Elliptic PDE, Functional Analysis, recapping basic theory in Harmonic Analysis, Pseudo-differential Operators, Fourier Restriction Theory and Modern Harmonic Analysis.	Fall 2025
Independent Reading Course <i>Advisor: Prof. Tian Jing, University of Michigan</i> We are reading Journé, <i>Calderon-Zygmund Operators, Pseudo-Differential Operators and the Cauchy Integral of Calderon</i> , and have finished Chapter 0, 1, 2, 3. I presented two hours every week.	Fall 2025

Relevant Coursework

Click [here](#) for the full list of courses with detailed descriptions.

Graduate-level Courses: Analysis, Harmonic Analysis, Analysis (II), Manifolds and Geometry, Sino-Italian Mathematical Courses in Analysis (Course I: Geometric Hamiltonian Dynamics; Course II: Evolution Equations), Introduction to Partial Differential Equations.

Upper-level Undergraduate Courses (selected): Real Analysis, Functions of one Complex Variable, Selected Topics in Analysis, Functional Analysis, Differential Geometry, From calculus to cohomology.

Honors and Awards

RENMIN Scholarship, Nanjing University	2023, 2024, 2025
Nanjing University Undergraduate Scholarship for Fundamental Disciplines	2023, 2024, 2025
Silver Medal, Chinese Girls' Mathematical Olympiad (CGMO)	2021

Talks and Presentations

- “John–Nirenberg Inequality”, Student DE Seminar, Nanjing University, Spring 2025.
- “Separation Theorem of Convex Sets”, course presentation, *Analysis II*, Nanjing University, Spring 2025.
- “Galois Cohomology”, course presentation, *Galois Theory*, Nanjing University, Fall 2024.
- “Poincaré’s Inequality”, course presentation, *Selected Topics in Analysis*, Nanjing University, Spring 2024.
- “Radon Transform”, Nanjing University Undergraduate Forum, Fall 2023.

Leadership and Academic Service

Freshman Peer Mentor, Youxun College, Nanjing University	Fall 2024–Spring 2025
Peer Study Leader (Math Glue Program), Nanjing University	Fall 2023
Co-organizer, Undergraduate Analysis Seminar, Nanjing University	Fall 2022–Spring 2023

Academic Programs, Conferences and Seminars

Summer School on Harmonic Analysis (auditor) Aug 2025
Nanjing University

International Science Summer School (Mathematics Track) Jul 2024
Westlake University

Seminars & Forums:

- Prof. Sijue Wu’s Students’ Seminar (auditor), University of Michigan Fall 2025
- Differential Equations Seminars (auditor), University of Michigan Fall 2025
- Recent Progress in Hamilton–Jacobi Equations (auditor), Nanjing University June 2025
- Young Scholars Forum on Harmonic Analysis (auditor), Nanjing University Oct 2024
- Fractal Geometry Seminar (participant, supervisor: Prof. Hua Qiu), Nanjing University Fall 2024
- Nanjing University Undergraduate Forum (participant) 2022–2025

Skills

Languages: Chinese (native), English (fluent).

Technical: L^AT_EX (proficient).