

Che Shen

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Education

Columbia University , Ph.D. Candidate in Mathematics	Sept 2021 – present
Advisor: Andrei Okounkov	
Columbia University , M.S. in Computer Science	Sept 2017 – Feb 2019
Peking University , B.A. in Mathematics	Sept 2013 – July 2017

Research Interests

Representation theory, algebraic geometry

Research

- **Relative Quasimaps and Tilting Module of $U(\mathfrak{gl}_n)$.** *arXiv:2509.04690*
- **Affine Laumon space and contragredient dual Verma module of $U_q(\hat{\mathfrak{gl}}_n)$.**
arXiv:2402.08613

Invited Talks

- *Mathematical Physics Seminar*, **Perimeter Institute**, October 2025.
- *Geometric Methods in Representation Theory Seminar*, **UNC-Chapel Hill**, October 2025.
- *Informal String-Math Seminar*, **UC Berkeley**, September 2025.
- *Geometry, Symmetry, and Physics Seminar*, **Yale University**, September 2025.
- *Geometric Representation Theory Seminar*, **Tsinghua University**, July 2024.
- *Informal Mathematical Physics Seminar*, **Columbia University**, March 2024.

Teaching Experience

Columbia University

Instructor for:

- Calculus I Spring 2025

Teaching assistant for:

- Calculus II Fall 2025

- Calculus III Fall 2024
- Analysis and Optimization Spring 2024
- Modern Analysis Fall 2023
- Lie Groups and Representations Fall 2023

Services

Seminar co-organizer, Representation Theory and Categorification Fall 2024 and Spring
 seminar, co-organized with Davis Lazowski, Alvaro Martinez and Fan 2025
 Zhou