

Shuang Ming

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Born: December 22nd 1990—Wuhan, China
Nationality: Chinese

Education

2009-2013 A.B in Mathematics, Wuhan University, China
2009-2013 A.B in Economics, Wuhan University, China
2013-2019 Ph.D in Mathematics, University of California, Davis(Advisor: Greg Kuperberg)

Employment

2019-2022 Visiting Assistant Professor, Texas A&M University
2022- Postdoctoral, BIMSAs

Research interest

Quantum algebra, geometric topology and representation theory

Publications and Preprints

2018 (with Greg Kuperberg) *On TQFT representations of mapping class groups with boundary.* *arXiv:1809.06896*
2022 (with Zhaobidan Feng and Eric Rowell) *Reconstructing modular subcategories of $SU(N)_k$.* (submitted)
arXiv:2202.00121
2023 (with Zhengwei Liu, Yilong Wang and Jinsong Wu) *3-Altrefolds and Quantum Invariants.* *arXiv:2307.12284*

Invited talks

2018 Feb UC Davis Student-Run Applied & Math Seminar: "Quantum representations of mapping class groups and braid groups."
2018 Nov TAMU Geometry Seminar: "Irreducibility and Denseness of TQFT representations of mapping class groups"
2019 Jan Joint Mathematics Meetings: "On TQFT representations of mapping class groups."
2022 Mar AMS Sectional meeting on quantum algebra and quantum topology: "Reconstructing braided sub-categories of $SU(N)_k$."
2023 Jun Quantum Theory and Operator Theory: "Tensor categories and bi-colored three manifolds."

Conferences and Workshops

- 2016 Southeastern Lie Theory Workshop: Algebraic Groups, Quantum Groups and Geometry, University of Virginia, May 24-27.
- 2016 Workshop on Algebra and Representation Theory: Knot homologies, Hilbert schemes, and Cherednik algebras, University of Oregon, July 25-29.
- 2017 Summer school 2017 of the IMJ-PRG: Mapping class groups and their representations, Jussieu Campus, July 3-7.
- 2017 Fall Western Sectional Meeting, University of California, Riverside, November 4-5.
- 2018 Mathematics Research Communities: Quantum Symmetries: Subfactors and Fusion Categories, Rhode Island, June 10-16.
- 2019 Categorification in Quantum Topology and beyond, ESI, Vienna, January 6-18.
- 2019 Joint Mathematics Meetings, Baltimore, January 16-19.
- 2019 Conference on New Developments in Quantum Topology, University of California, Berkeley, June 3-7.
- 2020 Tensor categories and topological quantum field theories, MSRI, Berkeley, March 16-20. (Moved online)
- 2022 AMS Sectional meeting on quantum algebra and quantum topology, Purdue University, March, 26-27.
- 2023 Quantum Theory and Operator Theory satellite conference, BIMSAs, July, 11-14.
- 2023 The 1st International Congress of Basic Science, BIMSAs, July, 16-28.
- 2023 IWoAT Summer School 2023: Operads, spectra, and multiplicative structures, BIMSAs, August, 14-19.

Teaching

- 2017 Winter Instructor for 21B Calculus(UC Davis)
- 2018 Summer Instructor for 21B Calculus(UC Davis)
- 2013-2018 Teaching Assistant at UC Davis
- 2019 Fall Instructor for 152 Engineering Calculus(TAMU)
- 2020 Spring Instructor for 304 Linear Algebra(TAMU)
- 2020 Fall Instructor for 304 Linear Algebra(TAMU)
- 2021 Spring Instructor for 304 Linear Algebra(TAMU)
- 2021 Fall Instructor for 304/323 Linear Algebra(TAMU)
- 2022 Spring Instructor for 323 Linear Algebra(TAMU)
- 2023 Teaching Assistant at BIMSAs