
EMAIL	chrislpkuo@berkeley.edu
INTEREST	<ul style="list-style-type: none"> • Microlocal Sheaf Theory • D-modules • Symplectic and Contact Geometry • Noncommutative geometry • Geometric Representation Theory • Mirror Symmetry
EDUCATION AND TRAINING	<ul style="list-style-type: none"> • Ph.D. in Mathematics, UC Berkeley, 2016-2022. Advisor: Vivek Shende. Thesis title: Symplectic geometric methods in microlocal sheaf theory. • B.S. in Mathematics, National Taiwan University, Taipei, Taiwan 2010-2014. Advisor: Chung-Jun Tsai. Thesis title: A calculation for the Hard Lefschetz map on six-manifolds constructed by Coisotropic Luttinger Surgery
APPOINTMENTS	<ul style="list-style-type: none"> • Postdoc at the Max Planck Institute for Mathematics, Summer 2025 - Present. • Postdoc for Noncommutative Algebraic Geometry, SLMATH, Spring 2024. • Assistant Professor (RTPC) of Mathematics, University of Southern California, Fall 2022 - Spring 2025. — Herbert and Ruth Busemann Assistant Professor in Mathematics, Fall 2023 - Spring 2024.
RESEARCH	<ul style="list-style-type: none"> • Tomohiro Asano, Yuichi Ike, C. Kuo, and Wenyuan Li. <i>C^0-rigidity of Legendrian submanifolds via sheaf quantization</i>, in preparation. • C. Kuo and Harold Williams. <i>Tropical Lagrangian coamoebae and free resolutions</i>. arXiv:2412.18071, submitted to Advances in March 2025. • C. Kuo and Wenyuan Li. <i>Relative Calabi-Yau structure on microlocalization</i>. arXiv:2408.04085, submitted to Selecta in August 2025. • C. Kuo and Wenyuan Li. <i>Duality and Kernels in Microlocal Geometry</i>, IMRN 2025 (2025): rnaf070. (arXiv:2405.15211) • Laurent Côté, C. Kuo, David Nadler, and Vivek Shende. <i>The microlocal Riemann-Hilbert correspondence for complex contact manifolds</i>. arXiv:2406.16222, submitted to Inventiones in April 2025. • C. Kuo, Vivek Shende, and Bingyu Zhang. <i>On the Hochschild cohomology of Tamarkin categories</i>. arXiv:2312.11447, submitted to Advances in June 2025. • C. Kuo and Wenyuan Li. <i>Spherical adjunction and Serre functor from microlocalization</i>. arXiv:2210.06643, submitted to Transactions of the AMS in February 2025. • Laurent Côté, C. Kuo, David Nadler, and Vivek Shende. <i>Perverse Microsheaves</i>. arXiv:2209.12998, submitted to Compositio in November 2024. • C. Kuo. <i>Wrapped sheaves</i>, Advances in Mathematics 415 (2023): 108882. (arXiv:2102.06791)

PH.D. STUDENTS SUPERVISED	<ul style="list-style-type: none"> • Haosen Wu, current, co-supervised with Wenyuan Li under Sheel Ganatra.
TEACHING EXPERIENCE	<ul style="list-style-type: none"> • Instructor, Math 125, Calculus I, University of Southern California, Spring 2025 • Instructor, Math 425a, Fundamental Concepts of Analysis, University of Southern California, Spring 2025 • Instructor, Math 425a, Fundamental Concepts of Analysis, University of Southern California, Fall 2024 • Instructor, Math 144, Foundations of Statistics, University of Southern California, Fall 2023 • Instructor, Math 245, Mathematics of Physics & Engineering I, University of Southern California, Spring 2023 • Instructor, Math 125g, Calculus I, University of Southern California, Fall 2022 • Graduate Student Instructor, Math 110 Linear Algebra, UC Berkeley, Spring 2020 • Graduate Student Instructor, Math 16B Analytic Geometry and Calculus, UC Berkeley, Spring 2019 • Graduate Student Instructor, Math 54 Linear Algebra and Differential Equations, UC Berkeley, Fall 2017 and Fall 2018 • Graduate Student Instructor, Math 53 Multivariable Calculus, UC Berkeley, Spring 2017 • Graduate Student Instructor, Math 1A Calculus, UC Berkeley, Fall 2016 • Teaching Assistant, Geometry (Required course for juniors), National Taiwan University, Fall 2013
SEMINARS	<ul style="list-style-type: none"> • Co-organizer, Topology seminar, University of Southern California, Fall 2022-Spring 2025 • Organizer, Deformation quantization modules learning seminar, Syddansk Universitet, Fall 2021 - Spring 2022
INVITED TALKS	<ul style="list-style-type: none"> • Riemann-Hilbert on contact manifolds, MPI-Oberseminar, MPIM, August 2025. • Tropical Lagrangian coamoebae and free resolutions, Syzygies and Mirror Symmetry Virtual Seminar, April 2025. • Symplectic Geometry and Sheaves, Geometry and Topology Seminar, UC Irvine, November 2024. • A quick introduction of microlocal sheaf theory, NAG GRT Seminar, SLMath, February 2024. • Globalizing the microlocal Riemann-Hilbert correspondence, Algebraic Geometry Seminar, UC Davis, January 2024. • Globalizing the microlocal Riemann-Hilbert correspondence, Algebraic Geometry Seminar, Academia Sinica, January 2024. • Globalizing the microlocal Riemann-Hilbert correspondence, Geometry Seminar, Kyushu University, January 2024. • Microlocal Riemann-Hilbert correspondence, QM Research Seminar, University of Southern Denmark, December 2023. • Microlocal Riemann-Hilbert correspondence, Bonn symplectic geometry sem-

inar, December 2023.

- Perverse Microsheaves, Mathematics Seminars, Montana State University, October 2023.
- Perverse Microsheaves, Differential geometry and symplectic topology seminar, University of Minnesota, September 2023.
- Sheaf Theoretic Methods in Symplectic Geometry, NCTS Differential Geometry Seminar, National Center for Theoretical Sciences, Taipei City, May 2023.
- Microlocal sheaf theory in noncommutative geometry, Algebraic Geometry Seminar, Academia Sinica, Taipei City, May 2023.
- Microlocal sheaf theory in noncommutative geometry, UCSB Seminar on Geometry and Arithmetic, University of California, Santa Barbara, May 2023.
- Wrapped sheaves, Topology Seminar in USC, September 2022
- Wrapped sheaves, QM Research Seminar in SDU, March 2022
- Wrapped sheaves, U. Iowa Topology Seminar, December 2021

SEMINAR AND TALKS

- Sheaf quantization and the topology of cotangent bundles, guest lecture in Sheel Ganatra's Math 699, USC, Fall 2022
- Nondisplaceability results for Lagrangians in toric symplectic manifolds, Southern California Symplectothon, October 2022
- Hochschild homology, Deformation quantization modules learning seminar, Syddansk Universitet, February 2022
- Kernels, Deformation quantization modules learning seminar, Syddansk Universitet, December 2021
- Algebroids, Deformation quantization modules learning seminar, Syddansk Universitet, November 2021
- Nonlinear regularity and local existence, J-Holomorphic curves learning seminar, Syddansk Universitet, October 2021
- Deformation of a sheaf of rings, Deformation quantization modules learning seminar, Syddansk Universitet, October 2021
- E_n -algebras and iterated loop spaces, Geometric Representation Theory seminar, UC Berkeley, Spring 2020
- Speaker, Wrapped Floer Homology Learning Seminar, Fall 2019
- Hochschild-Kostant-Rosenberg theorem through loop spaces, Geometric Representation Theory seminar, UC Berkeley, November 27 and December 14 2018
- Koszul duality for algebras, Deformation Theory Seminar, UC Berkeley, October 15 2017
- Gerbes. Mayer-Vietoris calculations, K-theory Seminar, UC Berkeley, April 2017
- Adams operation, K-theory Seminar, UC Berkeley, February 2017
- Winter Camp for Fundamentals in Mathematics for College Students, National Taiwan University, January 23-February 8, 2013

PROFESSIONAL SERVICE

- Beisitzer, Laurent Côté's Introduction to symplectic geometry, Universität Bonn, SoSe 2025
- Master thesis second reader, Universität Bonn, SoSe 2025

AWARDS AND
HONORS

- Topology Screening Exam Committee, University of Southern California, Fall 2024
- Co-organizer, The Los Angeles Workshop on Representations and Geometry (LAWRGe), Summer 2023
- Referee for Annals of Mathematics, Compositio, and G&T
- Shing-Tung Yau College Student Mathematics Contest, Bronze medal in geometry and topology, 2014
- Honors Program in Mathematics, National Taiwan University, 2014
- Chow Hung-Ching Scholarship, Institute of Mathematics - Academia Sinica, 2013