

EMAIL	chrislpkuo@berkeley.edu
INTEREST	<ul style="list-style-type: none"> • Microlocal Sheaf Theory • D-modules • Geometric Representation Theory • Symplectic and Contact Geometry • Noncommutative geometry • Mirror Symmetry
EDUCATION AND TRAINING	<ul style="list-style-type: none"> • Ph.D. in Mathematics, UC Berkeley, 2016-2022, awarded on May 13, 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"> • Sheel Ganatra, C. Kuo, Wenyuan Li, and Haosen Wu. <i>Integral transforms and compactness</i>, in preparation. • Tomohiro Asano, Yuichi Ike, C. Kuo, and Wenyuan Li. <i>C^0-rigidity of Legendrians and coisotropics via sheaf quantization</i>, arXiv:2510.01746, submitted in October 2025. • C. Kuo and Harold Williams. <i>Tropical Lagrangian coamoebae and free resolutions</i>. arXiv:2412.18071, submitted in March 2025. • C. Kuo and Wenyuan Li. <i>Relative Calabi-Yau structure on microlocalization</i>. arXiv:2408.04085, submitted 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 in April 2025. • C. Kuo, Vivek Shende, and Bingyu Zhang. <i>On the Hochschild cohomology of Tamarkin categories</i>. arXiv:2312.11447, submitted in June 2025. • C. Kuo and Wenyuan Li. <i>Spherical adjunction and Serre functor from microlocalization</i>. arXiv:2210.06643, submitted in February 2025. • Laurent Côté, C. Kuo, David Nadler, and Vivek Shende. <i>Perverse Microsheaves</i>. arXiv:2209.12998, submitted 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">• Organizer, Microlocal learning seminar, University of Southern California, Spring 2025• 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">• Perverse microsheaves on contact manifolds, seminar at the Chair of Arithmetic Geometry, EPFL, November 2024.• 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 Ge-

ometry 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 seminar, 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

- Recollection on analytic stacks, Arbeitsgruppe Arithmetische Geometrie und Darstellungstheorie (ARGOS), MPIM, WiSe 2025.
- 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, Introduction to symplectic geometry, Universität Bonn, SoSe 2025
- Master thesis second reader, Universität Bonn, SoSe 2025
- 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, G&T, and J. Top ($\times 2$).

AWARDS AND
HONORS

- 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