

Jiantong Liu*

CONTACT INFORMATION ◇ Phone: (424)440-9698 273 Altgeld Hall
◇ Email: jl106@illinois.edu Department of Mathematics
◇ Website: jiantongliu.github.io University of Illinois Urbana-Champaign
Urbana, IL 61801

RESEARCH INTEREST Algebraic Geometry, Algebraic K-theory, Homotopy Theory.

EDUCATION **University of Illinois Urbana-Champaign (UIUC)** *Aug 2023 - Present*
Ph.D., Mathematics

University of California, Los Angeles (UCLA) *Sept 2019 - Jun 2023*
B.S., Mathematics, with Departmental Highest Honors
B.S., Cognitive Science, with Specialization in Computing

PUBLICATIONS ◇ *Bounds in Simple Hexagonal Lattice and Classification of 11-stick Knots.* (With Y. Bao, A. Benveniste, M. Campisi, N. Cazet, A. Goh, E. Sherman.) *J. Knot Theory Ramif.* (2023), Vol. 32, No. 14, 2350097.

TALKS **External**
◇ *Bounds in Simple Hexagonal Lattice and Classification of 11-stick Knots.* AMS Special Session at Joint Mathematics Meeting, January 2023, Boston, Massachusetts.

Internal
◇ *Étale Cohomology.* UIUC Étale Cohomology Learning Seminar, June 2024.
◇ *Descent Theory.* UIUC Étale Cohomology Learning Seminar, May 2024.
◇ *Equivariant Cohomology.* UIUC Equivariant Homotopy Theory Learning Seminar, February 2024.
◇ *Triangulated Category's Christmas Wish List.* UIUC Graduate Algebraic Geometry and Commutative Algebra Seminar, September 2023.
◇ *Enriched Categories and Applications.* UCLA Directed Reading Program Colloquium, March 2022.

AWARDS UCLA Latin Honors, Magna cum laude *Jun 2023*

UCLA Departmental Highest Honors in Mathematics *Jun 2023*

TEACHING **At UIUC** *Aug 2023 - Present*
◇ MATH 257, *Linear Algebra with Computational Applications*, Teaching Assistant.
◇ MATH 444, *Elementary Real Analysis*, Course Grader.
◇ MATH 241, *Calculus III*, Course Grader.

At UCLA *Sept 2020 - Sept 2022*
◇ MATH 115AH, *Upper Division Linear Algebra (Honors)*, Course Grader. (×5)
◇ MATH 115A, *Upper Division Linear Algebra*, Course Grader. (×2)
◇ MATH 105 Series, *Mathematics and Pedagogy for Teaching Secondary Mathematics*, Course Grader. (×3)

At UCLA Olga Radko Endowed Math Circle *Sept 2021 - Jun 2023*
◇ Intermediate Level, Assistant Instructor.

*Last updated June 2024.

SERVICES	UIUC Graduate Affairs Committee	<i>Aug 2023 - May 2024</i>
	Organization for Transformative Works (OTW)	<i>Oct 2018 - Present</i>
RESEARCH EXPERIENCE	Undergraduate Researcher at Polymath Jr	<i>Jun 2022 - Jan 2023</i>
	Topic: On combinatorial knot theory, in particular on stick knots.	
	Supervisors: Professor Marion Campisi, Nicholas Cazet	
	Undergraduate Researcher at UCLA CAM REU	<i>Jun 2021 - Aug 2021</i>
	Topic: On compartmental modeling, in particular on SEIR models.	
	Supervisors: Professor Andrea Bertozzi, Professor Paul Brantingham, Professor David Hyde, Professor Chuntian Wang, Yotam Yaniv	
	Lab Research Assistant at UCLA Psychology Department	<i>Mar 2022 - Mar 2023</i>
	Topic: On object recognition and motion perception.	
	Supervisors: Professor Zili Liu, Yang Xing, Maggie Yeh	
CONFERENCES & WORKSHOPS ATTENDED	SLMath Summer School on Algebraic Curves, Berkeley, CA.	<i>Jul 2024</i>
	Algebraic Geometry Northeastern Series, Boston, MA.	<i>Mar 2024</i>
	Symmetric Tensor Categories and Representation Theory, Los Angeles, CA.	<i>Jan 2024</i>
	Western Algebraic Geometry Symposium, St. Louis, MO.	<i>Nov 2023</i>
	Midwest Topology Seminar, Champaign, IL.	<i>Sept 2023 - Oct 2023</i>
	Joint Mathematics Meeting, Boston, MA.	<i>Jan 2023</i>
	HoTTEST Summer School, Virtual.	<i>Jul 2022 - Aug 2022</i>
SKILLS	Programming Languages: R, Python, Java, C++	
	Other Mathematical Tools: MATLAB, Lean, Agda	
	General Tools: WordPress, \LaTeX	
	Language: Chinese (native), English (fluent)	