

Jiantong Liu*

CONTACT INFORMATION ◇ Phone: (424)440-9698 273 Altgeld Hall
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RESEARCH INTEREST Algebraic Geometry, Algebraic K-theory, Category 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 Highest Departmental 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.) ArXiv:2211.00687. To appear in *Journal of Knot Theory and Its Ramifications*.

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
◇ *Equivariant Cohomology*. Equivariant Homotopy Theory Learning Seminar, February 2024.
◇ $+ = Q$. UIUC Algebraic K-theory Reading Seminar, February 2024.
◇ *Quillen's and Suslin's K-theory. (5 parts)* UIUC Algebraic K-theory Reading Seminar, October - December 2023.
◇ *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 Highest Departmental Honors in Mathematics *Jun 2023*

TEACHING **At UIUC** *Aug 2023 - Present*
◇ MATH 257, *Linear Algebra with Computational Applications*, Teaching Assistant.
◇ 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 January 30, 2024.

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	
SERVICES	UIUC Graduate Affairs Committee	<i>Aug 2023 - May 2024</i>
	Organization for Transformative Works (OTW)	<i>Oct 2018 - Present</i>
SKILLS	Programming Languages: R, Python, Java, C++	
	Other Mathematical Tools: MATLAB, Lean, Agda	
	General Tools: WordPress, L ^A T _E X	
	Language: Chinese (native), English (fluent)	