

# Jiantong Liu\*

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CONTACT INFORMATION	◇ Phone: (424)440-9698 ◇ Email: <a href="mailto:jl106@illinois.edu">jl106@illinois.edu</a> ◇ Website: <a href="https://jiantongliu.github.io">jiantongliu.github.io</a>	273 Altgeld Hall Department of Mathematics University of Illinois Urbana-Champaign Urbana, IL 61801
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RESEARCH INTEREST Algebraic Geometry, Algebraic K-theory, Homotopy Theory.

EDUCATION	<b>University of Illinois Urbana-Champaign (UIUC)</b> Ph.D., Mathematics	Aug 2023 - Present
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	<b>University of California, Los Angeles (UCLA)</b> B.S., Mathematics, with Departmental Highest Honors B.S., Cognitive Science, with Specialization in Computing	Sept 2019 - Jun 2023
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PUBLICATIONS	◇ <i>Bounds in Simple Hexagonal Lattice and Classification of 11-stick Knots.</i> (With Y. Bao, A. Benveniste, M. Campisi, N. Cazet, A. Goh, E. Sherman.) <i>J. Knot Theory Ramif.</i> (2023), Vol. 32, No. 14, 2350097.
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TALKS	<b>External</b> ◇ <i>Bounds in Simple Hexagonal Lattice and Classification of 11-stick Knots.</i> AMS Special Session at Joint Mathematics Meeting, January 2023, Boston, Massachusetts.  <b>Internal</b> ◇ <i>Étale Cohomology.</i> UIUC Étale Cohomology Learning Seminar, June 2024. ◇ <i>Descent Theory.</i> UIUC Étale Cohomology Learning Seminar, May 2024. ◇ <i>Equivariant Cohomology.</i> UIUC Equivariant Homotopy Theory Learning Seminar, February 2024. ◇ <i>Triangulated Category's Christmas Wish List.</i> UIUC Graduate Algebraic Geometry and Commutative Algebra Seminar, September 2023. ◇ <i>Enriched Categories and Applications.</i> UCLA Directed Reading Program Colloquium, March 2022.
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AWARDS	UCLA Latin Honors, Magna cum laude	Jun 2023
	UCLA Departmental Highest Honors in Mathematics	Jun 2023

TEACHING	<b>At UIUC</b> ◇ MATH 257, <i>Linear Algebra with Computational Applications</i> , Teaching Assistant. ◇ MATH 444, <i>Elementary Real Analysis</i> , Course Grader. ◇ MATH 241, <i>Calculus III</i> , Course Grader.	Aug 2023 - Present
	<b>At UCLA</b> ◇ MATH 115AH, <i>Upper Division Linear Algebra (Honors)</i> , Course Grader. (×5) ◇ MATH 115A, <i>Upper Division Linear Algebra</i> , Course Grader. (×2) ◇ MATH 105 Series, <i>Mathematics and Pedagogy for Teaching Secondary Mathematics</i> , Course Grader. (×3)	Sept 2020 - Sept 2022

	<b>At UCLA Olga Radko Endowed Math Circle</b> ◇ Intermediate Level, Assistant Instructor.	Sept 2021 - Jun 2023
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\*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	<b>Undergraduate Researcher at Polymath Jr</b>	<i>Jun 2022 - Jan 2023</i>
	<b>Topic:</b> On combinatorial knot theory, in particular on stick knots.	
	<b>Supervisors:</b> Professor Marion Campisi, Nicholas Cazet	
	<b>Undergraduate Researcher at UCLA CAM REU</b>	<i>Jun 2021 - Aug 2021</i>
	<b>Topic:</b> On compartmental modeling, in particular on SEIR models.	
	<b>Supervisors:</b> Professor Andrea Bertozzi, Professor Paul Brantingham, Professor David Hyde, Professor Chuntian Wang, Yotam Yaniv	
	<b>Lab Research Assistant at UCLA Psychology Department</b>	<i>Mar 2022 - Mar 2023</i>
	<b>Topic:</b> On object recognition and motion perception.	
	<b>Supervisors:</b> 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</i>
	Joint Mathematics Meeting, Boston, MA.	<i>Jan 2023</i>
	HoTTEST Summer School, Virtual.	<i>Jul-Aug 2022</i>
SKILLS	Programming Languages: R, Python, Java, C++	
	Other Mathematical Tools: MATLAB, Lean, Agda	
	General Tools: WordPress, $\text{\LaTeX}$	
	Language: Chinese (native), English (fluent)	