

Jiantong Liu*

CONTACT INFORMATION	<ul style="list-style-type: none">◇ Phone: (424)440-9698◇ Email: jl106@illinois.edu◇ Website: jiantongliu.github.io	Altgeld Hall Department of Mathematics University of Illinois Urbana-Champaign Urbana, IL 61801
RESEARCH INTEREST	Algebraic Geometry, Algebraic Topology, Category Theory, Homotopy Theory.	
EDUCATION	University of Illinois Urbana-Champaign (UIUC) Ph.D., Mathematics	<i>Aug 2023 - Present</i>
	University of California, Los Angeles (UCLA) B.S., Mathematics, with Highest Departmental Honors B.S., Cognitive Science, with Specialization in Computing	<i>Sep 2019 - Jun 2023</i>
PUBLICATION	Preprint[†] <ul style="list-style-type: none">◇ Y. Bao, A. Benveniste, M. Campisi, N. Cazet, A. Goh, J. Liu, E. Sherman, “Bounds in Simple Hexagonal Lattice and Classification of 11-stick Knots”, November 2022. https://doi.org/10.48550/arXiv.2211.00687. Submitted.	
TALK	◇ <i>Bounds in Simple Hexagonal Lattice and Classification of 11-stick Knots</i> . AMS Special Session at Joint Mathematics Meeting, January 2023, Boston, Massachusetts. [Abstract]	
RESEARCH	Undergraduate Researcher at Polymath Jr Topic: On combinatorial knot theory, in particular on stick knots. Supervisors: Professor Marion Campisi, Nicholas Cazet	<i>Jun 2022 - Jan 2023</i>
	Undergraduate Researcher at UCLA CAM REU Topic: On compartmental modeling, in particular on SEIR models. Supervisors: Professor Andrea Bertozzi, Professor Paul Brantingham, Professor David Hyde, Professor Chuntian Wang, Yotam Yaniv	<i>Jun 2021 - Aug 2021</i>
	Lab Research Assistant at UCLA Psychology Department Topic: On object recognition and motion perception. Supervisors: Professor Zili Liu, Mac Xing	<i>Mar 2022 - Jun 2023</i>
TEACHING	At UCLA <ul style="list-style-type: none">◇ Course Grader 115AH Honors Linear Algebra 115A Linear Algebra 105ABC Mathematics for Teaching◇ Assistant Instructor at UCLA Math Circle	<i>Sep 2020 - Sep 2022</i> <i>Sep 2021 - Jun 2023</i>
AWARDS	Latin Honors, Magna cum laude	<i>Jun 2023</i>
	Highest Departmental Honors in Mathematics	<i>Jun 2023</i>

*Last updated June 27, 2023.

[†]Authors are listed in alphabetical order. The corresponding authors' names are **in bold**.

GRADUATE-LEVEL COURSEWORK	At UIUC	
	500	Abstract Algebra I
	502	Commutative Algebra
	518	Differentiable Manifolds I
	595	Group Cohomology
	At UCLA	
	205A	Algebraic Number Theory
	210ABC	Algebra
	212A	Homological Algebra
	212B	Tensor Triangulated Geometry
	214AB	Algebraic Geometry
	215A	Commutative Algebra
	225A	Differential Topology
	225C	Algebraic Topology
	229A	Lie Groups and Lie Algebra
SEMINARS	UCLA Algebra Seminar	
	◇ ∞ -Category Theory	<i>Mar 2023 - Jun 2023</i>
	Faculty: Professor Paul Balmer	
	Text: Riehl & Verity, <i>Elements of ∞-Category Theory</i>	
	◇ Reductive Algebraic Groups	<i>Jan 2023 - Mar 2023</i>
	Faculty: Professor Alexander Merkurjev	
	Text: Knus et al., <i>The Book of Involutions</i>	
	The HOTTest Summer School	<i>Jul 2022 - Aug 2022</i>
VOLUNTEERING	Organization for Transformative Works (OTW)	<i>Oct 2018 - Present</i>
SKILL	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)	