## Jiantong Liu\*

Interest

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Information  $\diamond$  Email: jl106@illinois.edu Department of Mathematics

♦ Website: jiantongliu.github.io University of Illinois Urbana-Champaign

Urbana, IL 61801

RESEARCH 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 HonorsB.S., Cognitive Science, with Specialization in Computing

Publications **Preprint**<sup>†</sup>

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.

♦ Bounds in Simple Hexagonal Lattice and Classification of 11-stick Knots. AMS Special Session at Joint Mathematics Meeting, January 2023, Boston, Massachusetts. [Abstract]

AWARDS UCLA Latin Honors, Magna cum laude Jun 2023

UCLA Highest Departmental Honors in Mathematics

Jun 2023

Research Undergraduate Researcher at Polymath Jr Jun 2022 - Jan 2023

**Topic:** On combinatorial knot theory, in particular on stick knots.

Supervisors: Professor Marion Campisi, Nicholas Cazet

Undergraduate Researcher at UCLA CAM REU

Jun 2021 - Aug 2021

**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 Mar 2022 - Mar 2023

**Topic:** On object recognition and motion perception.

Supervisors: Professor Zili Liu, Yang Xing, Maggie Yeh

TEACHING At UIUC

♦ Course Grader Aug 2023 - Present

241 Calculus III

At UCLA

<sup>\*</sup>Last updated November 8, 2023.

<sup>&</sup>lt;sup>†</sup>Authors are listed in alphabetical order. The corresponding authors' names are **in bold**.

	♦ Course Grader	Sept 2020 - Sept 2022
	115AH Honors Linear Algebra	
	115A Linear Algebra	
	105ABC Mathematics for Teaching	
	$\diamond$ Assistant Instructor at UCLA Math Circle	Sept 2021 - Jun 2023
Services	UIUC Graduate Affairs Committee	Aug 2023 - May 2024
	Organization for Transformative Works (OTW)	Oct 2018 - Present
Skills	Programming Languages: R, Python, Java, C++	
	Other Mathematical Tools: MATLAB, Lean, Agda	
	General Tools: WordPress, $\LaTeX$	
	Language: Chinese (native), English (fluent)	