Jiantong Liu[*]

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RESEARCH INTEREST

Algebraic Geometry, Algebraic Topology, Category Theory, Homotopy Theory.

EDUCATION

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

University of California, Los Angeles (UCLA)   *Sep 2019 - Jun 2023*
B.S., Mathematics, with Highest Departmental Honors

B.S., Cognitive Science, with Specialization in Computing

PUBLICATION

Preprint[†]
◇ 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

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

RESEARCH

Undergraduate Researcher at Polymath Jr   *Jun 2022 - Jan 2023*
Topic: On combintorial 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 - Jun 2023*
Topic: On object recognition and motion perception.

Supervisors: Professor Zili Liu, Mac Xing

TEACHING

At UCLA
◇ Course Grader   *Sep 2020 - Sep 2022*

115AH Honors Linear Algebra

115A Linear Algebra

105ABC Mathematics for Teaching

◇ Assistant Instructor at UCLA Math Circle   *Sep 2021 - Jun 2023*

AWARDS

Latin Honors, Magna cum laude   *Jun 2023*

Highest Departmental Honors in Mathematics   *Jun 2023*

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[*]Last updated August 14, 2023.

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

SEMINARS	**UCLA Algebra Seminar**	
	◇ ∞-Category Theory	*Mar 2023 - Jun 2023*
	Faculty: Professor Paul Balmer	
	Text: Riehl & Verity, *Elements of ∞-Category Theory*	
	◇ Reductive Algebraic Groups	*Jan 2023 - Mar 2023*
	Faculty: Professor Alexander Merkurjev	
	Text: Knus et al., *The Book of Involutions*	
	The HOTTest Summer School	*Jul 2022 - Aug 2022*
VOLUNTEERING	Organization for Transformative Works (OTW)	*Oct 2018 - Present*
SKILL	Programming Languages: R, Python, Java, C++	
	Other Mathematical Tools: MATLAB, Lean, Agda	
	General Tools: WordPress, LaTeX	
	Language: Chinese (native), English (fluent)	