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 - 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
  ⋄ 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*

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*Last updated August 20, 2023.

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

Awards	Latin Honors, Magna cum laude	*Jun 2023*
	Highest Departmental Honors in Mathematics	*Jun 2023*

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*

Service	UIUC Graduate Affairs Committee	*Aug 2023 - May 2024*
	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)