

Tongtong Liang

Curriculum Vitae

UCSD
La Jolla
US

📞 +1 858-644-9137
✉ ttl@ucsd.edu

Research Interests

Algebraic topology and algebraic geometry, especially motivic homotopy theory and algebraic K-theory.

Homepage

tongtongliang.github.io

Education

- 2023-present **University of California, San Diego**, *PhD in Mathematics*, Advisor: Zhouli Xu
- 2021–2023 **Southern University of Science and Technology, China**, *Master in Mathematics (expected June, 2023)*, Advisor: Yifei Zhu
- 2017–2021 **Southern University of Science and Technology, China**, *Bachelor in Mathematics with Honors*
- 2014–2017 **Shenzhen Middle School, China**, *Experimental Curriculum*

Seminar Organizing

- 2021–2023 Graduate topology seminar
- 2020 Online seminar on higher categories
- 2019 Seminar on geometry and topology

Presentations

- | | | |
|------|---|--|
| 2023 | Motivic homotopy and cohomology theory | <i>Seminar in topology, UCSD</i> |
| 2022 | Quillen's theorem on formal group laws | <i>Graduate topology seminar</i> |
| 2022 | Methods of homotopy theory in algebraic geometry | <i>Graduate topology seminar</i> |
| 2021 | From model categories to ∞ -categories | <i>Seminar on model categories</i> |
| 2021 | All concepts are Kan extensions | <i>Seminar on model categories</i> |
| 2021 | Homotopy coherence problem and ∞ -categories | <i>Graduate topology seminar</i> |
| 2021 | Introduction to spectral sequences | <i>Graduate topology seminar</i> |
| 2021 | Introduction to Steenrod operations | <i>Graduate topology seminar</i> |
| 2021 | On the Grothendieck-Riemann-Roch theorem | <i>Seminar on algebraic number theory</i> |
| 2020 | An introduction to higher categories | <i>Online seminar on higher categories</i> |
| 2019 | Introduction to schemes | <i>Seminar on geometry and topology</i> |

- 2018 Introduction to ringed spaces *Seminar on geometry and topology*
2018 Introduction to categories and sheaves *Seminar on geometry and topology*

Summer School Participation

- 2023 Summer School on Operads, spectra and Multiplicative structures *BIMSA*
2022 Summer School on Chromatic Homotopy Theory and Higher (Infinity-Categorical) Algebra
BIMSA(online)
2021 Summer School on Equivariant Homotopy Theory *Fudan University(online)*
2020 Motivic, Equivariant and Non-commutative Homotopy Theory *IHES(online)*
2019 Algebra and Number Theory *Chinese Academy of Sciences*

Academic Awards

- Jan. 2022 Outstanding Teaching Assistant Award
Jun. 2021 Outstanding Undergraduate Thesis Award

Teaching

- Fall 2023 Teaching assistant for MATH20E (Vector Calculus) *UCSD*
Fall 2021 Teaching assistant for MA213-16 (Mathematical Analysis) *SUSTech*
Spring 2021 Grader for MAT8021 (Algebraic Topology) *SUSTech*

Language

Chinese(native)
English(TOEFL iBT Best Scores: Reading 29, Listening 28, Speaking 25, Writing 24)

Outreach

- 2021–2023 Barista *Camerata Coffee Community, SUSTech*
2021–2022 Student tutor *Learning Center, SUSTech*
2020–2022 Sports rehabilitator *Combat club, SUSTech*