# ANQI LI

## aqli@stanford.edu

https://aqlithium.github.io/anqili/

## **EDUCATION**

Palo Alto, California Stanford University Ph.D. in Mathematics May 2029 (expected) University of Cambridge Cambridge, UK MASt in Mathematics June 2024 (expected) Massachusetts Institute of Technology Cambridge, Massachusetts B.Sc. in Mathematics GPA: 5.0/5.0May 2023 Raffles Institution Singapore December 2018 Top 70 in class of 1200 Singapore GCE 'A' Levels: 7 Distinctions

## **PAPERS**

Authors listed in alphabetical order.

- 8. Samuel B. Hopkins, **Anqi Li**. Adversarially-robust Inference on Trees via Belief Propagation. Submitted.
- 7. Henry Cohn, **Anqi Li**. Improved Kissing Numbers in Seventeen through Twenty-two Dimensions. *In preparation*.
- 6. Dingding Dong, Anqi Li, Yufei Zhao. Common Linear Systems. In preparation.
- 5. Anqi Li, Dor Minzer. Friedgut-Kalai-Noar Theorem in the Grassmann setting. In preparation.
- 4. Anqi Li. Dynamics of Pop-Tsack Torsing. Submitted. Preprint available at arXiv:2209.11548.
- 3. **Anqi Li**, Lisa Sauermann. Sárközy's Theorem in Various Finite Field Settings. Accepted by SIAM Journal on Discrete Mathematics (SIDMA). Preprint available at arXiv:2212.12754.
- 2. Dain Kim, **Anqi Li**, Jonathan Tidor. Cubic Goldreich-Levin. Accepted by SODA 2023. Preprint available at arXiv:2207.13281.
- 1. **Anqi Li**. Progress on Local Properties Problems of Difference Sets. Accepted by European Journal of Combinatorics. Preprint available at arXiv:2201.00547.

# SELECTED HONORS AND FUNDING

<ul> <li>Stanford EDGE Doctoral Fellowship Program</li> </ul>	Autumn 2024 -
- Trinity Studentship in Mathematics (Trinity College, Cambridge)	Fall 2023 - Spring 2024
<ul> <li>MIT Jon A. Bucsela Prize in Mathematics</li> </ul>	Spring 2023
<ul> <li>Alice T. Schafer Mathematics Prize: Runner Up</li> </ul>	Fall 2022
<ul> <li>Mariana Polonsky Slocum (1955) Memorial Fund</li> </ul>	Spring 2022
- MIT Hartley Rogers Jr. Prize	Summer 2021
<ul> <li>Fund for the Future of Science (MIT School of Science)</li> </ul>	Summer 2020

### INVITED TALKS AND SUMMER SCHOOLS

# **Invited Talks**

- Robust Belief Propagation, Trinity College (Cambridge) BA Lunch Talks Michaelmas 2023
- Sárközy's Theorem in Various Settings, Stanford Combinatorics Seminar March 2023
- Cubic Goldreich-Levin, ACM-SIAM Symposium on Discrete Algorithms (SODA) January 2023
- Thresholds for Perturbed Schur Sets, Joint Mathematics Meetings (JMM): AMS Contributed Paper Session.
- Local Properties of Difference Sets, New York Number Theory Seminar: Combinatorial and Additive Number Theory (CANT).

#### **Summer Schools**

- High-dimensional phenomena in discrete analysis (American Inst. of Mathematics) May 2024
- Convex and Discrete Geometry Summer School (Erdős Center) Summer 2023
- Prague Summer School in Discrete Mathematics (PSSDM) Summer 2022
- Cornell Probability Summer School (CPSS) Summer 2022

## **SERVICE**

# MIT Mathematics Department

- 18.218 (Graduate): Ramsey theory. <i>Grader</i>	Spring 2023
- 18.226 (Graduate): Probabilistic Methods in Combinatorics. <i>Grader</i>	Fall 2022
- 18.408 (Graduate): Probabilistically Checkable Proofs. <i>Grader</i>	Fall 2022
- Tutor at the MIT Math Learning Center	Spring 2022
- 18.225 (Graduate): Graph Theory and Additive Combinatorics. <i>Grader</i>	Fall 2021
- 18.702: Algebra II. Undergraduate Assistant	Spring 2021

# MIT Computer Science Department

- 18.404: Introduction to Theory of Computation. Grader

Fall 2021

# Raffles Girls' School (Secondary)

 Course developer. Taught a seminar on mathematical modeling (topics covered include: linear programming, graph algorithms, statistical inference) to prepare students for the International Mathematics Modeling Challenge (IMMC)

## **ACTIVITIES**

- The Archimedeans (Mathematical Society of the University of Cambridge	ge) 2023 - 2024
- MIT Combinatorics Reading Group	Fall 2020 - May 2023
- MIT Asian Dance Team (ADT)	Spring 2020
- The Harvard-MIT Mathematics Tournament (HMMT) - Problem Editor	Fall 2019
- MIT Borderline Augmented Reality Mural Club	Fall 2019
- MIT Chroma Magazine - Spread Designer	Fall 2019