Zeyu Zheng

zeyuzheng19@fudan.edu.cn or zeyu.zheng@rutgers.edu

EDUCATION

Rutgers University, B.S. expected in Aug 2023

Pure Math major, with a minor in Computer Science

Fudan University, B.S. expected in Jul 2023

Shanghai, Mainland China Computational Math, Buqing Su Top-notch Talent Program in Mathematics

Budapest Semesters in Mathematics

Sep 2019 - Present

Budapest, Hungary, EU

with Highest Honors (for top students, based on professor recommendations)

Jan 2022 - Aug 2022

Coursework:

Combinatorics(A+), Advanced Combinatorics(A), Combinatorial Optimization(A-), Graph Theory(A), Number Theory(A+), Calculus(A), Complex Analysis(A-), Real Analysis(A-), Fourier Analysis(A+), Linear Algebra (A), Abstract Algebra (B+), Galois Theory (A+), Analytic Geometry (A), Discrete and Convex Geometry (A+), Topology (A), Algebraic Topology (B+), Mathematical Modeling (A), Mathematical Modeling and Practice (A), Theory of Computing (A+), Conjecture and Proof (A), Research Opportunities(A+), Research Opportunities II(A)

RESEARCH WORKS

- 1. Chaoliang Tang, Hehui Wu, Shengtong Zhang, and Zeyu Zheng, "On the Turán number of the linear 3—graph C_{13} ", Electronic Journal of Combinatorics Volume 29, Issue 3 (2022), P3.46. arXiv Journal version
- 2. Logan Post and Zeyu Zheng, "Common kings of a chain of cycles in a strong tournament", under review. arXiv
- 3. Tibor Jordán, Henry Simmons, Kaylee Weatherspoon and $\underline{\text{Zeyu Zheng}}$, "Regular graphs with extremal rigidity properties", $\underline{\text{submitted.}}$ $\underline{\text{PDF}}$
- 4. Ervin Győri, Xianzhi Wang and Zeyu Zheng, "Extremal planar graphs with no cycles of particular lengths", under review. arXiv
- 5. Yaobin Chen, Hehui Wu and Zeyu Zheng, Progress on the small quasi-kernel conjecture, in preparation.
- 6. Bhargav Narayanan and Zeyu Zheng, Maximum number of independent sets in 3-graphs, in preparation.

RESEARCH EXPERIENCE

- Fudan SCMS Combinatorics Research Group, Dec 2020 present
- Budapest Semesters in Mathematics Spring REU, Jan 2022 May 2022
- Budapest Semesters in Mathematics Summer REU, Jun 2022 Aug 2022
- Rutgers Discrete Math Research Group, Sep 2022 present

TEACHING EXPERIENCE

 $\bullet\,$ Fall 2021: TA for Linear Algebra at FDU

HONORS AND AWARDS

| • Hungarian BME Mathematical Contest for university students, second pla | ace 2022 |
|--|--|
| • Scholarship for Outstanding Students, Fudan University | $2020\hbox{-}2021 \ \& \ 2019\hbox{-}2020$ |
| • East China Cup Mathematical Modeling Contest, outstanding winner | 2021 |
| • The Chinese Mathematics Competition for college students, first prize | 2020 |
| • National High School Mathematical Contest, first prize | 2018 |

TALKS

| 1. 11th Cross-strait Conference on Graph Theory and Combinatorics | Aug~2021 |
|--|------------|
| 2. Graduate Student Seminar, Fudan University | Sep 2022 |
| 3. (poster) Undergraduate Mathematics Symposium, University of Illinois at Chicago | Nov 2022 |