

EDUCATION

Budapest Semesters in Mathematics (BSM)

Jan 2022 - present

Budapest, Hungary, EU

Buqing Su Top-notch Talent Program in Mathematics

Sep 2019 - present Fudan University (FDU), Shanghai, China

Semester on Large Networks and their Limits

May 2022 - Jun 2022

Erdős Center, Alfréd Rényi Institute of Mathematics, Budapest, Hungary, EU

Summer School on Flag Algebras (online)

Jun 2021 - Jul 2021

University of Illinois at Urbana-Champaign (UIUC), Urbana, IL, USA

Core Courses

Combinatorial Optimization (A-), Graph Theory (A), Calculus (A), Complex Analysis (A-), Real Analysis (A-), Linear Algebra (A), Abstract Algebra (B+), Analytic Geometry (A), Topology (A), Algebraic Topology (B+), Mathematical Modeling (A), Mathematical Modeling and Practice (A)

RESEARCH INTERESTS

B.S. in Mathematics

Combinatorics/ (Hyper)Graph Theory/ Combinatorial Optimization

RESEARCH PAPERS

1. Chaoliang Tang, Hehui Wu, Shengtong Zhang, and Zeyu Zheng, "Note on the Turán number of the linear 3-graph C_{13} ", submitted, arXiv:2109.10520v3, 5 pages (2021).

RESEARCH EXPERIENCE

Turán Number of Linear 3-Graphs

Dec 2020 - Oct 2021

Advisor: Hehui Wu Shanghai Center for Mathematical Sciences, Fudan University

• We introduced a new approach to this kind of problems. By this new method, we proved and strengthened a conjecture of András Gyárfás about the Turán number of a linear 3-graph. (arXiv:2109.10520v3)

Shannon Capacity of Graphs

Oct 2021 - present

Advisor: Hehui Wu Shanghai Center for Mathematical Sciences, Fudan University
• We are currently working on the Shannon Capacity of odd cycles. Our approach is to find a bound of independence number of $C_{2n+1}^{\ k}$, which is the strong product of k (2n+1)-cycles.

Planar Turán Number

Jan 2022 - present

Advisor: ERVIN GYŐRI Alfréd Rényi Institute of Mathematics & Budapest Semesters in Mathematics \bullet We have found a new approach to prove the Planar Turán Number of C_5 , i.e. to partition the graph into triangular blocks and calculate the "contribution" of each block. We've also found a better extremal construction.

Rigidity and Tensegrity Properties of Graphs

Jan 2022 - present

Advisor: Tibor Jordán Eötvös Loránd University & Budapest Semesters in Mathematics

• We are currently exploring several conjectures in this field, trying to establish some connections between graph rigidity and tensegrity.

TEACHING EXPERIENCE

• Fall 2021: TA for Linear Algebra at FDU

HONORS AND AWARDS

• Scholarship for Outstanding Students, FDU

2020-2021 & 2019-2020

• Eastern China Cup Mathematical Contest in Modeling, outstanding winner

2021 2020

 \bullet The Chinese Mathematics Competition for college students, first prize

2018

• National High School Mathematical Contest, first prize

TALKS

1. 11th Cross-strait Conference on Graph Theory and Combinatorics

Aug 2021