

#### **EDUCATION**

Budapest Semesters in Mathematics (BSM)

Jan 2022 - Aug 2022

Budapest, Hungary, EU

BS. in Mathematics

Sep 2019 - present

Fudan University (FDU), Shanghai, China

Buging Su Top-notch Talent Program in Mathematics

Semester on Large Networks and their Limits

May 2022 - Jun 2022

Erdős Center, Rényi Institute, Budapest, Hungary, EU

Summer School on Flag Algebras (online)

Jun 2021 - Jul 2021

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

### **RESEARCH INTERESTS**

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

2020 Dec - 2021 Oct

Shanghai Center for Mathematical Sciences, Fudan University

Advisor: Hehui Wu

• 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**

2021 Oct - present

Shanghai Center for Mathematical Sciences, Fudan University

Advisor: Hehui Wu

• 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.

#### Rigidity and Tensegrity Properties of Graphs

2022 Jan - present

Budapest Semesters in Mathematics

Advisor: Tibor Jordán

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

# Planar Turán Number

2022 Jan - present

Budapest Semesters in Mathematics

Advisor: Ervin Győri

• 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 are currently looking for a better construction of the extremal graph.

#### **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

• The Chinese Mathematics Competition (CMC), first prize

2020

 $\bullet$  National High School Mathematical Contest, first prize

2018

# **TALKS**