

#### **EDUCATION**

Budapest Semesters in Mathematics (BSM)

Jan 2022 - present Budapest, Hungary, EU

Sep 2019 - present

Buging Su Top-notch Talent Program in Mathematics

Fudan University (FDU), Shanghai, China

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

# **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<sub>13</sub>", 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 • 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

• 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