ALAİTTİN KIRTIŞOĞLU

Applied Mathematics
Illinois Institute of Technology
Chicago, USA

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https://kirtsoglu.github.io

Research Interests

Extremal Graph Theory, Positional Games

Education

Illinois Institute of Technology Chicago, USA
Ph.D. in Applied Mathematics, Advisor: Hemanshu Kaul 2021–present

Hacettepe University Ankara, Turkey
M.S. in Mathematics, GPA: 3.93/4.00, Advisor: Lale Özkahya 2019–2021

- Thesis: "Variations of Star Coloring on Graphs"

Lublin University of Technology Lublin, Poland
Erasmus Exchange Student Feb-June 2016

Mustafa Kemal University Hatay, Turkey
B.S. in Mathematics, GPA: 3.45/4.00, **In the first place** 2014–2018

- Senior Project: "The Game of Hex and Brouwer Fixed Point Theorem"

Teaching Experience

Illinois Institute of Technology Chicago, USA
Teaching Assistant Aug 2021–Present

- MATH 350 Introduction to Computational Mathematics Spring 2022
- MATH 251 Multivariate and Vector Calculus Spring 2022
- MATH 333 Complex Analysis and Linear Algebra Fall 2021
- MATH 252 Differential Equations Fall 2021

TED University Ankara, Turkey
Teaching Assistant Sep 2019–Aug 2021

- MATH 102 Multivariable Calculus Spring 2020, 2021
- MATH 221 Linear Algebra I Spring 2021
- MATH 101 Calculus of One Variable Fall 2019, 2020
- MATH 112 Introduction to Multivariable Calculus Fall 2019, Spring 2020
- MATH 203 Linear Algebra and Differential Equations Spring 2020

Papers Submitted To Journals

[1] A. Kırtışoğlu and L. Özkahya, "Coloring of Graphs Avoiding Bicolored Paths of a Fixed Length, [arXiv] ".

Contributed Talks

1. **British Combinatorial Conference (Online)** July 2021
   "Coloring of Graphs Avoiding Bicolored Paths of a Fixed Length"

2. **SIAM Conferences on Discrete Mathematics (Online)** July 2021
   "Coloring of Graphs Avoiding Bicolored Paths of a Fixed Length"

3. **European Combinatorial Conference (Online)** Sep 2021
   "Coloring of Graphs Avoiding Bicolored Paths of a Fixed Length"

Organizing

- **VI. Mathematics Meeting, Hacettepe University** Oct 2019
  Student seminars series. The meeting is held at different universities each semester and five to six hundred students attend.

- **Home Seminars** Dec 2018–July 2019
  Organized up to 20 math seminars in my home with 30 students studying at METU, Hacettepe and Bilkent Universities.

- **IV. Mathematics Meeting, Middle East Tecnical University** Oct 2018

Presentations

1. VII. Mathematics Meeting, Boğaziçi University Feb 2020
   "A Geometric Proof of the Infinity of Primes"

2. VI. Mathematics Meeting, Hacettepe University Oct 2019
   "Acyclic and Star Colorings of Regular Graphs"

3. IV. Mathematics Meeting, Middle East Technical University Oct 2018
   "Congruent Numbers and Elliptic Curves"

4. III. Mathematics Meeting, Galatasaray University Feb 2018
   "The Game of Hex and Brouwer Fixed Point Theorem"

Workshops

- Metric Graph Theory, at CIRM in Marseille, France Dec 6–11 2021
- Nesin Math Village Summer and Winter Schools, Turkey 2015–2020
- Cakilarasi Math Village Summer Schools, Turkey 2017–2019
- Analysis and Algebra Summer School, Turkish Mathematical Society June 19–23, 2017
- Analysis Summer School, Turkish Mathematical Society July 11–22, 2016

Skills and Hobbies

- **Languages:** English, Turkish (Native)
- **Computer Skills:** Phyton, Matlab, Latex
- **Hobbies:** GO Player (1 dan)