

İBRAHİM EMİR ÇİÇEKLİ

✉ IbrahimEmir.Cicekli@ogr.gsu.edu.tr

📍 Department of Mathematics, Galatasaray University, Istanbul, Turkey

EDUCATION

Galatasaray University, Turkey

2018 - 2023

Department Of Mathematics, GPA: 3.85, graduated with highest GPA of the department in 2023

-Graduation Project: Hyperbolic Geometry and the Modular Group

-Advisor: Prof. A. Muhammed Uludag, E-mail:muludag@gsu.edu.tr

RESEARCH & TEACHING EXPERIENCE

Research Group on Fundamental Modular Groupoid

October 2021 , ongoing

Supervisor: Assoc. Prof. Ayberk ZEYTİN, Galatasaray University

- Our research focusses on various aspects of fundamental modular groupoid, a groupoid containing all mapping class groupoids of oriented surfaces of finite type together with the universal mapping class groupoid.

Research Group on Symmetric Chain Decomposition of Poset lattices.

January 2022 - July 2022

Supervisor: Prof. Meral TOSUN

- Our main goal was to find symmetric chain decompositions of order lattices of the form $L(m,n)$.

- We read papers on previous combinatorial and geometric approaches to this problem.

- We tried build a bridge between combinatorial and geometric and algebraic tools used to solve problems of this kind.

Problem Sessions in Galatasaray University as Undergrad TA

Organized problem sessions of undergraduate courses in:

- MAT261 Linear Algebra

- MAT331 Probability

- MAT417 Differential Geometry

Private Tutoring

- Did private tutoring for undergraduate courses such as calculus, ODEs, PDEs and linear algebra.

AWARDS AND SCHOLARSHIPS

Grant, Tubitak

- Tubitak 2247-C: Grant for our project called “ Fundamental Modular Groupoid” .

WORKSHOPS

Undergraduate, Graduate Mathematics Program, Nesin Mathematics Village

2018-2021

Participant

-A mathematics programme in which students are taught various subjects by volunteering professors from all around the world in a secluded campus in İzmir, Şirince. It was founded by Prof. Ali Nesin who was awarded the Leelavati prize in 2018 for outstanding contribution to mathematics education.

- Took courses in : Category Theory, Sheaves and Algebraic Geometry.

Mirror symmetry for Looijenga interiors and beyond- Summer School

July 18- July 22, 2022

Participant

Participated only in the summer school part, the link can be found here.

Directed Reading Program Turkey

July-August 28 2022

Supervisor: Eda Kırımlı, University of Bristol

- I studied elliptic curves, complex multiplication and Schoof's algorithm. I gave a talk on August 28, 2022. You can find my talk here and my study report here.

Lectures on Hyperbolic Geometry

November 7- November 11 , December 5- December 10, 2022

as Organizer and participant

Lecturers : Daniel Massart-University of Montpellier, Gerard Besson- University Grenobles Alpes, Gilles Courtois-Sorbonne Université

- A series of lectures done at Galatasaray University by guest-professors.

-Starting from the problem of " understanding the topology and geometry of a space by its curvature" we went onto define δ -hyperbolic spaces, quasi-isometries and hyperbolic groups. The main problem of the second part was to understand a group, by turning it into a geometric space using Cayley graphs.

Mirror Symmetry and Differential Equations-Workshop

July 10- July 14 2023

Organizer

- Participants and talk subjects can be found here.

SKILLS

Languages:	Turkish- Native, English- Fluent, French-Fluent
Programming:	Python
Computer Algebra Systems:	Singular, Sage, MATLAB, Julia

EXTRACURRICULAR

Galatasaray University Mathematics Club

Board Member, Editor

- I volunteered as a board member responsible for organizing student seminars. Gave talks as well. I volunteered as an editor for the online published mathematics magazine.

Tohum Otizm Vakfi

Volunteer

- I volunteered at "Tohum Otizm Vakfi", a Turkish charity foundation which aims to provide education and medical help for people, especially children, on the autism spectrum.