

# İBRAHİM EMİR ÇİÇEKLİ

✉ibrahimemircicekli@gmail.com & ibrahim-emir.cicekli@universite-paris-saclay.fr

📍Faculté de Sciences, Université Paris-Saclay, France

## EDUCATION

**Université Paris-Saclay, France**

2023 - ongoing

M1 J.Hadamard

**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 , July 2023

*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 & CONFERENCES

**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.

## Conference in Honor of 65th birthday of Athanase Papadopoulos

June 20 - June 24 2022

Organizer

- Participants and talk subjects can be found 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  $\delta$ -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

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

## EXTRACURRICULAR

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### 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.