MEHMET KIRTIŞOĞLU

m.kirtisoglu@bilkent.edu.tr

https://mkirtisoglu.github.io

RESEARCH INTEREST

- Algebraic (combinatorial) topology: Homotopy, homology, cohomology, and category theory.

EDUCATION

Bilkent University Ankara, Turkey
Ph.D. in Mathematics, Advised by Prof. Dr. Ergün Yalçın 2024–2028 (expected)

Bilkent University Ankara, Turkey
M.Sc. in Mathematics, Advised by Prof. Dr. Ergün Yalçın 2022–2024

  − Master's Thesis: "Thomason's Homotopy Colimit Theorem and Cohomology of Categories"

Bilkent University Ankara, Turkey
B.Sc. in Mathematics 2018–2022

  − Senior Project: "Reconstruction of Networks of Chaotic Systems", Advised by Prof. Dr. Fatihcan Atay

PUBLICATIONS

- Thomason Cohomology and Quillen's Theorem A, (with E. Yalçın) - submitted, Mar 2025

SCHOLARSHIPS AND AWARDS

2024-2028	**National Ph.D. Scholarship Program (2211-A) by**
	The Scientific and Technological Research Council of Turkey
2022-2028	**Graduate Assistantship by Bilkent University**
2017-2022	**Outstanding Success Scholarship by Turkish Educational Foundation**
2017-2022	**National Undergraduate Scholarship Program (2205) by**
	The Scientific and Technological Research Council of Turkey
2017-2022	**Comprehensive Scholarship of Bilkent University**
2017	**Ranked in first 4000 in Nationwide University Entrance Exam**
	among 2 million high school students in Turkey

ORGANIZING

- **Bilkent Mathematics Graduate Seminar Series** Fall 2024-2025
  Graduate Student seminars series. The meeting aims to foster collaboration and discussion
  among graduate mathematics students of Bilkent University and to showcase the topics
  being studied in our department for undergraduate students.

- **IV. Mathematics Meeting, Middle East Technical University** Oct 2018
  Student seminars series. The meeting is held at different universities each
  semester and five to six hundred students attend.

- **V. Mathematics Meeting, Istanbul Bilgi University** March 2019

- **VI. Mathematics Meeting, Hacettepe University** Oct 2019

Mentorship

- [DRP Türkiye](#), Mentees: Ahmet Yusuf Öztürk, Boğaziçi University, on Homology, Summer 2025
  Aaditya Vicram Saraf, NISER, on Category Theory

Workshops

- [European Talbot](#) Higher algebra and chromatic homotopy theory, Denmark 30 June - 4 July 2025
  with Gijs Heuts and Ishan Levy
- [Nesin Math Village](#) Summer and Winter Schools, Turkey 2016–2025
- [Cakilarasi Math Village](#) Topology of Surfaces, Turkey 14 - 18 Aug 2023
- [DRP Türkiye](#), on Homotopy Theory (mentored by [Assist. Prof Feride Ceren Köse](#)) Summer 2022

Contributed Talks

- **Bilkent Mathematics Graduate Seminar Series** Feb 2025
  "An Introduction to Cohomology of Small Categories"

- **Bilkent Mathematics Topology Seminars** October 2023
  "Thomason's Homotopy Colimit Theorem"

- **Bilkent Mathematics Topology Seminars** December 2022
  "Simplicial Quantum Contextuality"

- **DRP Turkey Symposium at Bogazici University** Aug 2022
  "Seifert Van Kampen Theorem and Its Applications"

- **Bahar Mathematics Meeting VI, Hacettepe University** October 2019
  "An Algebraic Topological Proof of the Fundamental Theorem of Algebra"

Academic Experience

Bilkent University Ankara, Turkey
Graduate Assistantship, TA Sep 2022 –present

  − Calculus I, Calculus II, Linear Algebra, Topology

Network Oriented Dynamics and Data Science Research Group [(NODDS)](#) Istanbul, Turkey
Internship at Kadir Has University Nov 2020 –May 2022

  − Worked on Graph Theory, Stability Theory, Synchronization Theory