Bilal Aytekin

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EDUCATION

Boğaziçi University, Istanbul, Turkey   2018–2023
Computer Engineering B.Sc., Mathematics B.Sc.

University of Maryland   2023–
Mathematics, Ph.D.

RESEARCH INTERESTS

Number theory, arithmetic geometry, formalization.

PUBLICATIONS

1. **An Alexandrov Topology for Maximal Cohen-Macaulay Modules** (w/ Mert Akdenizli, Baran Çetin, and Özgür Esentepe),
   Journal of Pure and Applied Algebra, Volume 228, Issue 1

RESEARCH EXPERIENCE

Working Group on the Arithmetic of Elliptic Curves   June '22 – November '22
Supervisor: Mohammad Sadek, Sabancı University   *Arithmetic Statistics*

Research on Arithmetic Dynamics   March '22 – June '22
Supervisor: Alp Bassa, Boğaziçi University   *Arithmetic Dynamics*

Counting Varieties with Complex Multiplication   October '21 – August '22
Supervisor: Ayhan Günaydın, Boğaziçi University   *Arithmetic Geometry*

Research Group on Cohomology Annihilators   September '21 – October '22
Supervisor: Özgür Esentepe, University of Leeds   *Homological Algebra*

SERVICE

Grader for Introduction to Probability and Statistics for Computer Engineers, Fall '22.

Assistant for Graduate Algebra II, Fall '22.

Teaching Assistant for Calculus II (Fall '23, Fall '24), Calculus III (Spring '24).

TALKS

Local and Global Root Numbers of Elliptic Curves   June 10, 2022
Summer School on Applied Arithmetic

Torsion Subgroups of Elliptic Curves   September 12, 2021
Directed Reading Program Turkey Symposium 2021

REFERENCES

- Assoc. Prof. Alp Bassa, Boğaziçi University.
- Assoc. Prof. Ayhan Günaydın, Boğaziçi University.
- Dr. Özgür Esentepe, University of Leeds.