

# ELMAS IRMAK

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## Employment

**Lecturer II**, University of Michigan, Department of Mathematics, since 2023.

**Lecturer I**, University of Michigan, Department of Mathematics, 2019–2023.

**Visiting Scholar**, University of Michigan, Department of Mathematics, 2018–2019.

**Visiting Associate Professor**, University of Michigan, Department of Mathematics, Winter 2018.

**Associate Professor**, Bowling Green State University, Department of Mathematics and Statistics, 2011–2018.

**Assistant Professor**, Bowling Green State University, Department of Mathematics and Statistics, 2005–2011.

**Post-Doc Assistant Professor**, University of Michigan, Department of Mathematics, 2002–2005.

## Education

**Ph.D. in Mathematics**, Michigan State University, 2002.

**Graduate Student**, University of Oklahoma, 1995–1996.

**Graduate Student**, Middle East Technical University (METU), 1994–1995.

**B.S. Mathematics**, Honor Student, METU, Turkey, 1994.

## Research Visits

University of Michigan, 2012–2013, Spring 2016, 2018, 2019.

University of Birmingham, UK, May 2010.

Mathematical Sciences Research Institute, Berkeley, CA, 2007.

Max Planck Institute for Mathematics, Bonn, Germany, 2006.

## Research Interests

Geometric group theory, low-dimensional topology.

## Ph.D. Thesis

Superinjective Simplicial Maps of Complexes of Curves and Injective Homomorphisms of Subgroups of Mapping Class Groups, Michigan State University, 2002.

## Publications

- Irmak, E.: Superinjective simplicial maps of complexes of curves and injective homomorphisms of subgroups of mapping class groups, *Topology*, 43 (2004), No.3, 513–541.
- Irmak, E.: Superinjective simplicial maps of complexes of curves and injective homomorphisms of subgroups of mapping class groups II, *Topology and Its Applications*, 153 (2006), 1309–1340.
- Irmak, E.: Complexes of nonseparating curves and mapping class groups, *Michigan Mathematical Journal*, 54 (2006), 81–110.

- Irmak, E. and Korkmaz, M.: Automorphisms of the Hatcher-Thurston complex, *Israel Journal of Mathematics*, 162 (2007), 183–196.
- Irmak, E.: Injective simplicial maps of the arc complexes on nonorientable surfaces, *Algebraic & Geometric Topology*, 9 (2009), 2055–2077.
- Irmak, E. and McCarthy, J.D.: Injective simplicial maps of the arc complex, *Turkish Journal of Mathematics*, 34 (2010), 339–354.
- Irmak, E.: Superinjective simplicial maps of the complexes of curves on nonorientable surfaces, *Turkish Journal of Mathematics*, 36, 407–421 (2012).
- Irmak, E., Ivanov, N. and McCarthy, J.D.: Automorphisms of surface braid groups, available at <https://arxiv.org/pdf/math/0306069>.
- Irmak, E.: On simplicial maps of the complexes of curves on nonorientable surfaces, *Algebraic & Geometric Topology* 14 (2014), 1153–1180.
- Irmak, E.: Edge preserving maps of the curve graphs in low genus, *Topology Proceedings*, 54 (2019), 205–231.
- Irmak, E. and Paris, L.: Injective homomorphisms of mapping class groups of nonorientable surfaces, *Geometriae Dedicata*, 198, 1 (2019), 149–170.
- Irmak, E. and Paris, L.: Superinjective simplicial maps of the two-sided curve complexes on nonorientable surfaces, *Fundamenta Mathematicae*, 249 (2020), 211–260.
- Irmak, E.: Edge preserving maps of the nonseparating curve graphs, curve graphs and the rectangle preserving maps of Hatcher-Thurston graphs, *Journal of Knot Theory and Its Ramifications*, Vol:29, No:11 (2020), 1-41, 2050078.
- Irmak, E.: Exhausting curve complexes by finite superrigid sets on nonorientable surfaces, *Fundamenta Mathematicae*, 255 (2021), 111–138.
- Irmak, E.: Exhausting curve complexes by finite rigid sets on nonorientable surfaces, *Journal of Topology and Analysis*, volume 16, issue 02, pages 261–289 (2024).