

# ELMAS IRMAK

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- Current Position** **Assistant Professor** Bowling Green State University, 2005-present.  
**Visitor** University of Birmingham, England, May 2010.  
**Member** Mathematical Sciences Research Institute, Berkeley, Fall 2007.  
**Member** Max Planck Institute for Mathematics, Germany, Summer 2006.
- Previous Position** **Assistant Professor**, University of Michigan, 2002-2005.
- Education** **Ph.D. in Mathematics**, Michigan State University, 1996-2002.  
Thesis Advisor: Prof. J.D. McCarthy.  
**Graduate student**, University of Oklahoma, 1995-1996.  
**Graduate student**, METU, Ankara, Turkey, 1994-1995.  
**B.S. Mathematics**, Honor Student, METU, Turkey, 09/1990-01/1994.
- Research Interests** Mapping class groups, low-dimensional topology.
- Ph.D. Thesis** *Superinjective Simplicial Maps of Complexes of Curves and Injective Homomorphisms of Subgroups of Mapping Class Groups*, MSU, 2002.
- Publications**
- “*Superinjective simplicial maps of complexes of curves and injective homomorphisms of subgroups of mapping class groups*”, *Topology* 43 (2004), No.3, 513-541.
  - “*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.
  - “*Complexes of nonseparating curves and mapping class groups*”, *Michigan Mathematical Journal* 54 (2006) 81-110.
  - “*Automorphisms of surface braid groups*”, (with N.Ivanov, J.D.McCarthy) available at <http://front.math.ucdavis.edu/math.GT/0306069>.
  - “*Automorphisms of the Hatcher-Thurston complex*” (with M.Korkmaz), *Israel Journal of Math.*, 162 (2007) 183-196.
  - “*Injective Simplicial Maps of the Arc Complex*”, (with J.D.McCarthy), *Turkish Journal of Mathematics*, 33 (2009) 1-16.
  - “*Injective Simplicial Maps of the Complexes of Arcs on Nonorientable Surfaces*”, *Algebraic & Geometric Topology*, 9 (2009) 2055-2077.
  - “*Superinjective Simplicial Maps of the Complexes of Curves on Nonorientable Surfaces*”, submitted.
- NSF Research Grant:** Mapping Class Groups, 2010, Under review.
- Awards & Fellowships** **AWM Travel Grant**, 2003, 2006, 2009.  
**Faculty Research Incentive Grant**, Bowling Green State University, 2009.  
**Fellowship**, Max Planck Institute for Mathematics, Germany, Summer 2006.  
**Rackham Faculty Fellowship**, University of Michigan, 2004.  
**Graham Fellowships**, Michigan State University, Summers of 1998. 1999, 2000, 2001 and 2002.

**Dissertation Completion Fellowship**, Michigan State University, Spring 2001.  
**Fellowship** by TUBITAK, Scientific and Technical Council of Turkey,  
(i) for graduate study abroad 1995, (ii) to attend a Special Program in Topology  
and Geometry, Feza Gursey Institute, Istanbul, 2000.  
**Support** to attend Gökova Conferences, TUBITAK, 1995, 1997, 1998, 2000.

**Ph.D. Thesis  
Committee Member**

Member of the Ph.D. thesis committee of C. Westerland in Topology, UM, 2004.  
Member of the Ph.D. thesis committee of T. Fiore in Topology, UM, 2005.  
Member of the Ph.D. thesis committee of N. A. Immormino in Algebra in BGSU.  
Member of the Ph.D. thesis committee of B. Carr in Algebra in BGSU.  
Member of the Ph.D. thesis committee of O. Kutovaya in Biology in BGSU.

**Talks**

Imperial College, May 2010  
University of Warwick, May 2010  
University of Birmingham, May 2010  
New Directions in Geometric Group Theory Conference, Australia, 2009  
University of Michigan, Ann Arbor, Sep 2009  
Boston College, Boston, April 2009  
University of Massachusetts at Amherst, April 2009  
Michigan State University, Michigan, March 2009  
BGSU, Colloquium, Ohio, Feb 2009  
Connections for Women: Geometric Group Theory, MSRI, August 2007  
University of Michigan, Ann Arbor, March 2007  
Universit Louis Pasteur, Institut de Mathmatiques, Strasbourg, June 2006  
Teichmuller Space (Classical and Quantum), Oberwolfach, June 2006  
International Conference on Topology and Its Applications, Aegion, June 2006  
Max-Planck Institute, Bonn, May 2006  
Ohio State University, Columbus, April 2006, AMS Meeting, Atlanta, Jan 2005  
University of Michigan, Ann Arbor, Sep, Oct 2002, Jan 2003, Oct 2004  
Michigan State University, E. Lansing, Sep 2004  
Albany Group Theory Conference, NY, Oct 2004  
University of Chicago, 2004, and University of Illinois at Chicago, 2004  
Wayne State University, Detroit, April 2004  
Middle East Technical University, Ankara, August 2003  
“Knots in Poland”, Warsaw, July 2003, Columbia University, NY, Feb 2003  
 $G^3$  Geometric Group Theory Conference, New Orleans, March 2002  
Special Session AMS Meeting, Ann Arbor 2002, and San Diego 2002

**Conferences**

Geometric Group Theory Conference, UM, April 2009  
Aspects of Teichmuller Theory Workshop, University of Michigan, April 2008  
Connections for Women: Teichmuller Theory and Kleinian Groups, MSRI, 2007  
Introduction to Teichmuller Theory and Kleinian Groups, MSRI, August 2007  
Connections for Women: Geometric Group Theory, MSRI, August 2007  
Introduction to Geometric Group Theory, MSRI, Berkeley, August 2007

Geometry and the Imagination, Princeton University, June 7-11 2007  
 Aspects of Teichmuller Theory Workshop, University of Michigan, April 2007  
 Canary-Fest, University of Michigan, Ann Arbor, Dec 2-3, 2006  
 Groups of Diffeomorphisms, Tokyo, September 2006  
 Teichmuller Space (Classical and Quantum), Oberwolfach, June 2006  
 Future Directions in 3-Manifolds, University of Michigan, Ann Arbor, Oct 2005  
 AMS Meeting, Atlanta, 2005, Albany Group Theory Conference, NY, 2004  
 “Knots in Poland”, Warsaw, July 2003, Cornell Topology Festival, May 2003  
 $G^3$  Geometric Group Theory Conference, March 2002  
 AMS Meeting, San Diego Jan 2002, Ann Arbor, March 2002  
 AMS Meetings, New Orleans Jan 2001, Columbia University Oct 2000  
 Gökova Geometry-Topology Conference, Mugla, May 1995, 1997, 1998, 2000  
 AMS Meetings, Notre Dame 2000, Washington DC 2000, Univ. of Texas, 1996  
 Finite and Locally Finite Groups Conf., supp. by NATO-ASI, Istanbul, 1994  
 Turkish National Mathematics Conf., Dogu Akdeniz Univ., Gazimagusa, 1994.

**Paper Reviewer:** Geometriae Dedicata, Pacific Journal of Mathematics.

**Teaching Experience** **Assistant Professor** BGSU, 2005-present  
*Topology I-II, Algebra I-II, Modern Algebra I-II, Modern Geometry, Fund. Concepts of Modern Algebra, Introduction to Logic, Discrete Mathematics.*  
**Assistant Professor** University of Michigan, 2002-2005.  
*Advanced Calculus I, Introduction to Modern Algebra.*  
*Calculus III, Honors Calculus I-II, Calculus I-II, Reading course in group theory and topology, summer 2004, Advisor in REU Program, summer 2004.*  
**Graduate Teaching Assistant** at Michigan State University, 1996-2002.  
*Intermediate Algebra, College Algebra and Trig. I, College Algebra, Survey of Calculus with Applications I (MTH 124)*  
**Lead Teaching Assistant** for MTH 124, Spring, Fall 1999, Spring, Fall 2000, Fall 2001, MSU, Lead Teaching Ass. for Math Learning Center, Spring 1998, MSU.

**Activities** **Member (BGSU)**, Dept. of Math. & Stat. Library Committee 2005-2006, University Library Advisory Committee 2006, Arts and Sci. Council, Committee of Prof. Affairs, Colloquium committee chair, Grad. Student Selection Committee, KME advisor 2008-2009, Arts and Sciences Council, Committee of Professional Affairs, Grad. Student Selection Committee, KME advisor 2009-2010.  
**Topology seminars**, Organized weekly, University of Michigan, 2003-2004.  
**Member**, Dean’s Student Advisory Council, Col. of Nat. Sci., MSU, 2000-2001.  
**Member**, College Scholarship and Awards Committee, College of Natural of Science, MSU, 2000-2001.  
**Member**, Student Advisory Committee, Dept. of Math. MSU, 2000-2001.  
**Facilitator**, International Teaching Assistant Orientation Program, MSU, 1999.  
**Panelist**, Cultural Differences in Classroom Panel, International Teaching Assistant Orientation Program, MSU, Summer 1999 and Summer 2000.  
**Guide**, Feza Gursey Science Center, Ankara, Turkey, 1993-1994.

**Teacher**, Science School for Children, Feza Gursey Science Center, Ankara, Turkey, Summer 1994.

**Member**, Organization Committee, International Math. Olympiad, Turkey, 1993.

**Member**, Executive board for Undergraduate Students Mathematics Union, Middle East Technical University, Ankara, Turkey, 1992-1994.