

HOWARD M THOMPSON

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Citizenship US

Employment Assistant Professor, Spring Arbor University, 2006 - present
Assistant Professor, University of Michigan, 2002 - 2006

Education Ph.D. in Mathematics, University of California, Berkeley, 2002.
Dissertation under supervision of Arthur Ogus: *On toric log schemes*
B.S., University of California, Irvine, 1984

Research Interests Commutative Algebra & Algebraic Geometry, especially Multiplier Ideals, Log Geometry, Toric Varieties and Semigroup Rings

Papers & Preprints Irrelevant exceptional divisors for curves on a smooth surface, Algebra, geometry and their interactions, Contemp. Math., vol. 448, Amer. Math. Soc., Providence, RI, 2007, pp. 245-254.
Toric singularities revisited, J. Algebra 299 (2006), no. 2, 503-534.
Comments on toric varieties, math.AG/0310336
Fan is to monoid as scheme is to ring: a generalization of the notion of a fan, math.AG/0306221

Invited Workshops Combinatorial challenges in toric varieties, American Institute of Mathematics Research Conference Center, April 27 - May 1, 2009
Combinatorial Game Theory, Banff International Research Station, January 20-25, 2008
Numerical invariants of singularities and higher-dimensional algebraic varieties, American Institute of Mathematics Research Conference Center, July 31 - August 4, 2006
Convex and Algebraic Geometry, Mathematisches Forschungsinstitut Oberwolfach, January 29 - February 4, 2006

- Invited Talks**
- An introduction to toric singularities*, Mathematics Seminar, University of Michigan-Flint, March 2008
 - Toric singularities revisited*, AMS Joint Summer Research Conference, Commutative Algebra: Presentations by Young Researchers (Snowbird, UT), July 2003
 - Comments on toric varieties*, AMS Special Session on Combinatorial Commutative Algebra and Algebraic Geometry, (San Francisco, CA), May 2003
 - Multiplier ideals of torus invariant ideals on \mathbb{Q} -Gorenstein toric varieties can be computed using convex geometry*, Algebraic Geometry Seminar, University of Michigan, October 2002
 - From toric varieties to log schemes*, Algebraic Geometry Seminar, University of Michigan, March 2002
- Teaching**
- Instructor, Calculus I (MAT 201), Fall 2008
 - Instructor, Linear Algebra & Differential Equations (MAT 301), Fall 2008
 - Instructor, Real Analysis (MAT 401), Fall 2008

 - Instructor, Mathematics for Social Scientists II, Inter-University Consortium for Political and Social Research Summer Program in Quantitative Methods of Social Research, Summer 2008

 - Instructor, Calculus II (MAT 202), Spring 2008
 - Instructor, Discrete Mathematics (MAT 232), Spring 2008
 - Instructor, Vector Calculus (MAT301), Spring 2008
 - Instructor, Algebra (MAT 101), Fall 2007
 - Instructor, Calculus I (MAT 201), Fall 2007
 - Instructor, Linear Algebra (MAT 352), Fall 2007

 - Instructor, Mathematics for Social Scientists II, Inter-University Consortium for Political and Social Research Summer Program in Quantitative Methods of Social Research, Summer 2007

 - Instructor, Calculus II (MAT 202), Spring 2007
 - Instructor, Discrete Mathematics (MAT 232), Spring 2007
 - Instructor, Modern Geometry (MAT 421), Spring 2007
 - Instructor, Basic College Mathematics (MAT 100), Interim 2007
 - Instructor, Calculus I (MAT 201), Fall 2006
 - Instructor, Differential Equations (MAT 311), Fall 2006
 - Instructor, Linear Algebra (MAT 352), Fall 2006
 - Instructor, Real Analysis (MAT 401), Fall 2006

Teaching Instructor, Mathematics for Social Scientists II, Inter-University Consortium for Political and Social Research Summer Program in Quantitative Methods of Social Research, Summer 2006

Instructor, Calculus II (Math 116), Fall 2005

Instructor, Calculus III (Math 215), Spring 2005

Instructor, Directed Reading and Research (Math 700), Winter 2005

Instructor, Linear Algebra and Differential Equations (Math 214),
Fall 2004

Instructor, Linear Algebra and Differential Equations (Math 214),
Winter 2005

Instructor, Introduction to Linear Algebra (Math 513), Fall 2003

Instructor, Applied Modern Algebra (Math 312), Winter 2003

Instructor, Calculus I (Math 115), Fall 2002

Instructor, Discrete Mathematics (Math 55), Summer 2001

Graduate Student Instructor, Discrete Mathematics (Math 55), Fall 2000

Instructor, Linear Algebra (Math 110), Summer 2000

GSI, Calculus (Math 1B), Spring 2000

GSI, Calculus (Math 1A), Fall 1999

Instructor, Discrete Mathematics (Math 55), Summer 1999

GSI, Algebraic Curves (Math 255), Spring 1999

GSI, Linear Algebra and Differential Equations (Math 54), Fall 1998

Instructor, Linear Algebra and Differential Equations (Math 54),
Summer 1998

Co-organizer, Preliminary Examination Workshop, 1995 - 1998

GSI, Discrete Mathematics (Math 55), Spring 1997

GSI, Calculus (Math 1A), Fall 1996

Teaching Assistant, Summer Mathematics Institute Berkeley
(Calculus on Manifolds), Summer 1993

Community Teaching Fellow (providing mathematics enrichment at an
elementary school), Spring 1993

GSI (tutoring upper division students for Berkeley's Professional
Development Program), Fall 1992

Honors University of California Dissertation Year Fellowship, 2001 - 2002

Outstanding GSI Award, 1999 - 2000

National Science Foundation Graduate Fellowship, 1993 - 1995

Department of Education National Need Fellowship, 1991 - 1992