

CURRICULUM VITAE

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EDUCATION

- Doctor of Philosophy, Mathematics, University of Maryland, College Park, MD, expected May 2006.
- Master of Science, Mathematics, Tennessee Technological University, Cookeville, TN, 2000.
- Bachelor of Science, Mathematics, Tennessee Technological University, Cookeville, TN, 1998.

ACADEMIC TEACHING EXPERIENCE

- Graduate Assistant, University of Maryland, Mathematics Department, College Park, MD, August 2000 - Present.
- Lecturer, University of Maryland, Mathematics Department, College Park, MD, Summer 2001, 2002, 2004, 2005.
- Teaching Assistant, Tennessee Technological University, Mathematics Department, Cookeville, TN, 1999 - 2000.
- Adjunct Faculty, Tennessee Technological University, Mathematics Department, Cookeville, TN, Summer 2000.

COURSES TAUGHT

- College Algebra.
- PreCalculus.
- Calculus I.
- Calculus II.
- Mathematics for Elementary School Teachers.
- Grader for Algebraic Topology.

RESEARCH FELLOWSHIPS / ACADEMIC HONORS AND AWARDS

- Graduate School Dissertation Fellowship, University of Maryland, Spring 2006.
- VIGRE research fellowship, University of Maryland, *Fall 2005*.
- NSF research grant DMS-0104006 under Dr. John J. Millson, *Fall 2003 – Spring 2005*.
- S.A. Patil Award, Tennessee Technological University, *1999*.
- Virginia Tech Outstanding Achievement in Mathematics, Tennessee Technological University, *1999*.

PUBLICATIONS

- Benjamin J. Howard, *Matroids and Geometric Invariant Theory of torus actions on flag spaces*, <http://lanl.arxiv.org/abs/math.AG/0511608>.
- Benjamin J. Howard, John J. Millson, and Christopher Manon, *The toric geometry of polygons in Euclidean space*, in preparation.
- Benjamin J. Howard, John J. Millson, Andrew Snowden, and Ravi Vakil, *The space of ordered points on the line is almost always cut out by quadrics*, in preparation, but a current version is available on my homepage, <http://www.math.umd.edu/~bhoward>.
- Benjamin J. Howard, John J. Millson, Andrew Snowden, and Ravi Vakil, *The projective invariants of ordered points on the line*, <http://lanl.arxiv.org/abs/math.AG/0505096>.
- Benjamin J. Howard and John J. Millson, *The Chevalley involution and a duality of weight varieties*, Asian Journal of Math, Armand Borel Memorial issue, Vol. 8 No. 4, pp 685-732, Dec. 2004.

INVITED SEMINAR PRESENTATIONS

- “The Projective Invariants of Ordered Points on the Line”, AMS 2006 Spring Eastern Sectional Meeting, special session on Arrangements and Configuration Spaces, April 22 or 23, 2006.
- “The Projective Invariants of Ordered Points on the Line”, Combinatorics Seminar, University of California Berkeley, February 6, 2006.
- “The Projective Invariants of Ordered Points on the Line”, Algebraic Geometry Seminar, Stanford University, February 3, 2006.
- “A Classical Problem in Invariant Theory Revisited”, Tennessee Technological University, Graduate Seminar, April 7, 2005.
- “States of Flags are Saturated”, University of Maryland, Representation Theory Seminar, February 2, 2005.
- “Duality of Coxeter Matroids”, George Washington University, Combinatorics Seminar, November 22, 2004, and December 2, 2004.
- “Duality of Coxeter Matroids”, Cornell University, Discrete Geometry and Combinatorics Seminar, October 20, 2004.
- “Duality of Weight Varieties”, University of Maryland, Representation Theory Seminar, October 11, 2004.

RESEARCH INTERESTS

- Invariant Theory.
- Algebraic Geometry.
- Symplectic Geometry.
- Representation Theory.
- Combinatorics.
- Polytopes.

UNIVERSITY SERVICE

- Co-organizer of Student Geometry Seminar, University of Maryland, Spring 2005 - present.
- Student Representative for the Graduate Mathematics Program, University of Maryland, Fall 2005 and Spring 2006.
- Student Representative for the College of Computer, Mathematical, and Physical Sciences, Fall 2005.