

David E. Anderson

Department of Mathematics
University of Michigan
2074 East Hall
530 Church Street
Ann Arbor, MI 48109-1043

Phone: 734-763-2429
Email: dandersn@umich.edu
www.math.lsa.umich.edu/~dandersn
DOB: March 21, 1979

EDUCATION

University of Michigan, Ph.D., 2009

- Thesis advisor: William Fulton
- Thesis title: *Degeneracy loci and G_2 flags*

Columbia University, B.A., 2002, *magna cum laude*

TEACHING

University of Michigan

- Co-Lecturer (with W. Fulton), Topics in the Geometry of Homogeneous Spaces (Winter 2009)
- Instructor, Calculus I (Fall 2004, Fall 2008)
- Instructor, Calculus II (Fall 2006)
- Co-coordinator, Calculus I (Winter 2008)
- Grader, Algebraic Geometry (Fall 2004, Fall 2005, Winter 2006)

Canada/USA Mathcamp (Summer 2006)

- Instructor and mentor for five-week program for gifted high-school students. Taught courses on projective geometry, combinatorics, and singularities of plane curves.

Middle East Technical University, Ankara (Fall 2002)

- Instructor, Calculus I

PUBLICATIONS AND PREPRINTS

- (1) “Arc spaces and equivariant cohomology,” with Alan Stapledon, in preparation.
- (2) *Degeneracy loci and G_2 flags*, Ph. D. thesis, University of Michigan, 2009.
- (3) “Degeneracy of triality-symmetric morphisms,” arXiv:0901.1347.
- (4) “Positivity and Kleiman transversality in equivariant K -theory of homogeneous spaces,” with Steve Griffeth and Ezra Miller, arXiv:0808.2785, submitted.
- (5) “Chern class formulas for G_2 Schubert loci,” arXiv:0712.2641, submitted.
- (6) “Positivity in the cohomology of flag bundles (after Graham),” arXiv:0711.0983.
- (7) “Schubert polynomials and classes of Hessenberg varieties,” with Julianna Tymoczko, arXiv:0710.3182, to appear in *J. Algebra*.
- (8) “A note on quantum products of Schubert classes in a Grassmannian,” *J. Algebr. Comb.* **25** (2007) 349–356.

- (9) “A cusp singularity with no Galois cover by a complete intersection,” *Proc. Amer. Math. Soc.* **132** (2004), 2517–2527.

RESEARCH TALKS

- AMS Sectional Meeting in Raleigh, NC, Special Session on Enumerative Geometry and Related Topics, April 2009
- University of British Columbia Algebraic Geometry Seminar, February 2009
- University of Illinois Urbana-Champaign Algebra, Geometry and Combinatorics Seminar, November 2008
- University of North Carolina Geometric Methods in Representation Theory Seminar, October 2008
- University of Michigan Combinatorics Seminar, September 2008
- University of Iowa Algebraic Geometry Seminar, April 2008
- AMS Sectional Meeting in New York, NY, Special Session on Algebraic Combinatorial Geometry, March 2008
- Queen’s University Algebraic Geometry Seminar, March 2008
- University of British Columbia Algebraic Geometry Seminar, February 2008
- University of Minnesota Combinatorics Seminar, January 2008
- University of Utah Algebraic Geometry Seminar, January 2008
- Stanford University Geometry and Combinatorics Seminar, October 2007
- GAeL XV, June 2007
- AMS Sectional Meeting in Storrs, CN, special session on Combinatorial Methods in Equivariant Topology, October 2006

CONFERENCES

- MSRI workshop on Classical Algebraic Geometry, January 2009
- Banff workshop on Recent Progress on the Moduli Space of Curves, March 2008
- MSRI workshop on Deformation Theory and Moduli in Algebraic Geometry, Summer 2007
- GAeL conference for young algebraic geometers, Summer 2007
- AMS Sectional Meeting in Storrs, CN, Fall 2006
- Oberwolfach workshop on Algebraic Stacks, Fall 2006
- AMS Summer Research Institute in Algebraic Geometry, Summer 2005
- Fields Institute workshop on Schubert varieties and Schubert calculus, June 2005

OTHER MATHEMATICAL ACTIVITIES

- (Co-)organized University of Michigan student algebraic geometry seminar, 2005–2007.
- Co-organized University of Michigan student workshop on curves and moduli, December 2006.

- Co-organized Columbia University student seminar on combinatorics and equivariant cohomology, Spring 2007.
- Reviewer for Mathematical Reviews.

FELLOWSHIPS AND AWARDS

- NSF Postdoctoral Fellowship, 2009–2012.
- Clay Liftoff Fellowship, 2009.
- RTG Graduate Fellowship, University of Michigan, 2005–2008.
- VIGRE Graduate Fellowship, University of Michigan, 2003–2005.
- VIGRE Undergraduate Scholarship, Columbia University, 2000–2002.
- Van Amringe Prize (Columbia University undergraduate math competition), 2000.
- Dolan Prize for instrumental study (classical guitar), 2000-2001.

REFERENCES

William Fulton wfulton@umich.edu
Sergey Fomin fomin@umich.edu
Ezra Miller ezra@math.duke.edu
Ravi Vakil vakil@math.stanford.edu
Karen Rhea krhea@umich.edu (teaching)