

STACY HOEHN

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Education **Ph.D. in Mathematics**, University of Notre Dame, Notre Dame, Indiana, expected May 2009.
Dissertation: Parametrized Wall and Siebenmann End Obstructions
Advisor: E. Bruce Williams

M.S. in Mathematics, University of Notre Dame, Notre Dame, Indiana, May 2006.

B.S. in Mathematics and Computer Science, Xavier University, Cincinnati, Ohio, May 2004.
Honors: Summa cum laude and Valedictorian.

Areas of Interest Algebraic and Geometric Topology, Algebraic K -Theory, and High-Dimensional Manifolds.

Honors National Science Foundation Graduate Research Fellowship, 2005-2009.
University of Notre Dame Arthur J. Schmitt Presidential Fellowship, 2004-2009.
U.S. Junior Oberwolfach Fellow, August 2006.
An award made possible by a National Science Foundation grant to support the participation of outstanding young scientists from U.S. universities in Oberwolfach workshops and seminars.

University of Notre Dame Richard Sady Prize, 2005.
An annual award given to the mathematics graduate student who had the best performance as a first-year graduate student, based on nominations from the faculty.

Mathematical Contest in Modeling, Meritorious Winner in 2002 and Honorable Mention Winner in 2003.

Talks Given “An Application of Controlled Topology.” Graduate Student Topology Conference, University of Chicago, April 21, 2007.

(with Allegra Berliner) “Microbundles.” Oberwolfach Mini-Workshop on the Hauptvermutung for High-Dimensional Manifolds, Mathematisches Forschungsinstitut Oberwolfach (MFO), Germany, August 14, 2006.

“Surgery and Automorphisms of Manifolds.” MIT’s Talbot Workshop, North Conway, New Hampshire, February 27, 2006.

Various Seminars at the University of Notre Dame, 2005-2008.

- “Constructing Family Versions of Geometric Invariants.”
- “Parametrized Wall Finiteness and Siebenmann End Obstructions.”
- “The Space of Compact Topological Fiber Bundle Structures on a Fibration.”
- “Equivariant CW Complexes.”
- “An Introduction to Spectral Sequences.”
- “The Method of Infinite Repetition in Topology.”
- “Microbundles and the Hauptvermutung.”
- “Surgery on Simply-Connected Manifolds.”
- “The h -cobordism Theorem.”
- “Wall’s Finiteness Obstruction and Siebenmann’s End Obstruction.”

Workshops and Conferences Attended

Central Section Meeting of the AMS, Western Michigan University, October 18-19, 2008.
 Central Section Meeting of the AMS, Indiana University, April 5-6, 2008.
 Graduate Student Topology Conference, University of Illinois at Urbana-Champaign, March 29-30, 2008.
 Midwest Topology Seminar, University of Notre Dame, February 23, 2008.
 Midwest Topology Seminar, University of Illinois at Urbana-Champaign, October 13, 2007.
 Graduate Student Topology Conference, University of Chicago, April 21-22, 2007.
 Nil Phenomena in Topology, Vanderbilt University, April 14-15, 2007.
 Frank Quinn's 60th Birthday Conference, SUNY-Binghamton, November 5-7, 2006.
 Oberwolfach Mini-Workshop on the Hauptvermutung for High-Dimensional Manifolds, Mathematisches Forschungsinstitut Oberwolfach (MFO), Germany, August 13-18, 2006.
 "Surgery Theory Past, Present and Future: a celebration of the 70th birthday of C.T.C. Wall." International Centre for Mathematical Sciences, Edinburgh, Scotland, July 2-5, 2006.
 Arbeitsgemeinschaft mit aktuellem Thema: Higher Torsion Invariants in Differential Topology and Algebraic K-Theory, Mathematisches Forschungsinstitut Oberwolfach, Germany, April 2-8, 2006.
 Talbot Workshop on Automorphisms of Manifolds, under the guidance of Michael Weiss. North Conway, New Hampshire, February 26 - March 4, 2006.
 Joint Meetings of the AMS and MAA, San Antonio, Texas, January 12-15, 2006.
 Graduate Student Topology Conference, Northwestern University, April 9-10, 2005.

Teaching Experience

Instructor, Principles of Calculus, University of Notre Dame, Fall 2008.
Designed all course content and conducted all lectures and collaborative learning activities as the sole instructor of this terminal calculus course for arts and letters students.

Instructor, Finite Mathematics, Balfour-Hesburgh Scholars Program, University of Notre Dame, Summer 2007 and Summer 2008.
Formulated all course content and ran all lectures for this course, which was part of an academic summer program for incoming minority students.

Mini-Course Instructor, Using R for Mathematical Statistics, University of Notre Dame, Spring 2007 and Spring 2008.
Taught math majors how to use the software environment R for statistical computing.

Instructor, Principles of Finite Mathematics, University of Notre Dame, Spring 2007.
Devised the course syllabus, quizzes, exams, collaborative learning activities, and lectures as the sole instructor of this course for arts and letters students.

Honors Undergraduate Reading Seminar Leader, Differentiable Manifolds and An Introduction to Topology, University of Notre Dame, Spring 2006 and Fall 2006.
Led freshmen and sophomore honors math majors in a special seminar designed to give them an opportunity to learn both about a new topic and also how to present math to their peers.

Teaching Assistant, Calculus I, University of Notre Dame, Spring 2006.
Developed collaborative learning activities and led tutorial sessions for this course for engineering students. Also worked in the Calculus Help Room, answering questions from students in all of Notre Dame's calculus classes.

Teaching Awards and Certifications	<p>Outstanding Graduate Student Teacher Award, Kaneb Center for Teaching and Learning, University of Notre Dame, Spring 2008.</p> <p>Striving for Excellence in College and University Teaching Certificate, Kaneb Center for Teaching and Learning, University of Notre Dame, Fall 2007.</p>
Departmental Service	<p>President of the Mathematics Graduate Student Association, University of Notre Dame, 2007-present.</p> <p>Organizer of the Topology Seminar, University of Notre Dame, 2007-2008.</p> <p>Organizer of the Semi-Annual Math Departmental Gatherings, University of Notre Dame, 2007-2008.</p> <p>Graduate Student Co-Coordinator of the Honors Undergraduate Reading Seminar Program, University of Notre Dame, 2007.</p> <p>Panelist in the Mathematics Teaching Seminar, University of Notre Dame, 2006-2008.</p> <p>Member of the Math Graduate Student Recruiting Committee, University of Notre Dame, 2006-2007.</p>
Other Professional Activities	<p>Judge at the Northwest Ohio Science and Engineering Fair, Northwest State Community College, 2006-2008.</p> <p>Participant of the EDGE (Enhancing Diversity in Graduate Education) program, Spelman College, Summer 2004.</p> <p>Applied Research Mathematician, Director's Summer Program, National Security Agency, Summer 2003.</p> <p>Participant of the SUMSRI (Summer Undergraduate Mathematical Sciences Research Institute) Research Experience for Undergraduates Program, Miami University, Summer 2002.</p>
References	<p><i>The following people have agreed to write letters of recommendation on my behalf:</i></p> <p>E. Bruce Williams, Professor, University of Notre Dame, Indiana Phone: (574) 631-6588, Email: williams.4@nd.edu</p> <p>C. Bruce Hughes, Professor, Vanderbilt University, Tennessee Phone: (615) 322-6660, Email: bruce.hughes@vanderbilt.edu</p> <p>Stephan Stolz, Rev. John A. Zahm Professor, University of Notre Dame, Indiana Phone: (574) 631-5451, Email: Stephan.A.Stolz.1@nd.edu</p> <p>Andrew Ranicki, Professor, University of Edinburgh, Scotland Phone: +44 131 6505073, Email: a.ranicki@ed.ac.uk</p> <p>(Teaching) Alex Himonas, Professor, University of Notre Dame, Indiana Phone: (574) 631-7583, Email: Alex.A.Himonas.1@nd.edu</p> <p>(Teaching) Christy Greene, University of Notre Dame, Indiana Director of the Balfour-Hesburgh Scholars Program Phone: (574) 631-7421, Email: cd.greene@nd.edu</p>