

ERIC B. KAHN

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Bloomsburg University

Department of Mathematical
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222 Ben Franklin Hall

EDUCATION

- Ph.D. Mathematics, Spring 2009, University of Kentucky
- M.A. Mathematics, Spring 2006, University of Kentucky
- B.A. Mathematics, Spring 2004, Kenyon College

RESEARCH AREA - Mathematics and Sports, Algebraic Topology, and Homological Algebra

FELLOWSHIPS AND AWARDS

- 2009 Project NExT Fellow - a competitive national professional development program for new mathematics faculty. The term NExT is an acronym for 'New Experiences in Teaching.'
- 2008 Certificate of Outstanding Teaching - award by the College of Arts & Sciences at the University of Kentucky for quality of teaching courses from the natural and mathematical sciences during the calendar year of 2007.
- 2007 & 2008 Max Steckler Fellowship
- 2003 Summer Science Scholar - a program for undergraduate students of the natural sciences, with the help of an advisor, are funded to create a research plan, complete the project, and present the results at a campus event.

TEACHING SUMMARY

- As Primary Instructor at BU
 - MATH 53.492 - Abstract Algebra 2 (Independent Study)
 - MATH 53.492 - Representation Theory (Independent Study)
 - MATH 53.451 - Introduction to Topology (Individualized Instruction)
 - MATH 53.422 - Complex Variables (Individualized Instruction)
 - MATH 53.405 - Abstract Algebra
 - MATH 53.360 - Number Theory
 - MATH 53.314 - Linear Algebra
 - MATH 53.226 - Calculus IV
 - MATH 53.225 - Calculus III

- MATH 53.217 - History of Mathematics
 - MATH 53.202 - Math Concepts II
 - MATH 53.126 - Calculus II
 - MATH 53.125 - Calculus I
 - MATH 53.123 - Essentials of Calculus
 - MATH 53.113 - Pre-Calculus
 - MATH 53.101 - Mathematical Thinking
- As Primary Instructor at UK
 - MATH 322 - Matrix Algebra
 - MATH 202 - Mathematics for Elementary Teachers II
 - MATH 201 - Mathematics for Elementary Teachers I
 - MATH 114 - Calculus II
 - MATH 111 - Contemporary Mathematics
 - MATH 109 - College Algebra
 - MATH 108 - Remedial Algebra
 - As Recitation Leader at UK
 - MATH 114 - Calculus II
 - MATH 113 - Calculus I

PUBLISHED WORK

1. “Exploring Discrete Mathematics with American Football” (coauthored with Tricia Brown), PRIMUS, Volume 25, Number 5, 2015, pg. 421-438.
2. Problems and Proofs in Numbers and Algebra, (coauthored with Richard S. Millman, and Peter J. Shuie), Springer Publishing, (February 2015).
3. “Flat discrete modules over profinite groups”, (coauthored with Ed Enochs) Communications in Algebra, Volume 42, Number 6, 2014, pg. 2331-2337.
4. “The relative Burnside kernel - the elementary abelian case”, Rocky Mountain Journal of Mathematics, Volume 43, Number 2, 2013, pg. 523-537.
5. “How deep is your playbook?” (coauthored with Tricia Brown), *Mathematics and Sports*, Mathematical Association of America, (August 2010).

TALKS and PRESENTATIONS

2017 “IBL SIGMAA”

Given jointly with TJ Hitchman, Brian Katz, Alison Marr, Victor Piercey, Candice Price, & Xiao Xiao
Poster Session, IBL mini-conference, Mathfest

- 2017 “A first attempt at a history of mathematics course: mathematics and general education”
History or Philosophy of Mathematics, MAA General Contributed Paper Session, MAA-AMS Joint Meetings
- 2017 “Perspectives on Inquiry Based Learning: Novice, Experienced, and Master”
MAA Panel, MAA-AMS Joint Meetings
- 2014 “American football and an unexpected introduction into upper level mathematics”
Given jointly with Tricia Muldon
Mathematics and Sports I, MAA paper session, MAA-AMS Joint Meetings
- 2013 “Developing voting systems on the first day: an IBL approach”
Projects, Demonstrations and Activities that Engage Liberal Arts Mathematics Students, MAA paper session
MAA-AMS Joint Meetings
- 2012 “Angle preservation and non-inscribable polyhedra”
Department seminar, Bloomsburg University
- 2011 “What kindergarten didn’t teach us about spheres”
Department seminar, Bloomsburg University
- 2010 “The Generalized Burnside and Representation Rings”
Group theory III session, MAA-AMS Joint Meetings
- 2009 “Football and mathematics : could you do it better?”
Department seminar, Bloomsburg University
- 2009 “The generalized Burnside and representation rings”
Doctoral defense, University of Kentucky
- 2008 “The relative Burnside kernel - the elementary abelian case”
Topology seminar, University of Kentucky
- 2008 “Bundles of vectors and where they can lead”
Graduate student colloquium, University of Kentucky
- 2007 “Ranks of specific relative Burnside and representation rings”
Topology seminar, University of Kentucky

- 2007 “Complex representations and Schur’s lemma”
Graduate student colloquium, University of Kentucky
- 2007 “A nice connection between the Burnside and representation rings”
Topology seminar, University of Kentucky
- 2006 “Amanda’s phone number problem”
Given jointly with Tricia Muldoon
Appalachian Association of Mathematics Teacher Educators, Moorehead
University
- 2006 “Relations between ordinary and extraordinary homology”
Topology seminar, University of Kentucky
- 2006 “Stein interpolation theorem”
MA773 - Boundary Value Problems, University of Kentucky
- 2005 “Smooth manifolds and smooth maps”
Topology seminar, University of Kentucky
- 2003 “Linear semigroups of operators exhibiting chaotic behavior”
Research poster session, Kenyon College

PROFESSIONAL SERVICE

- 2017-2018 Program Coordinator for IBL SIGMAA (elected, two calendar year term)
- 2013-present PASSHE-MA Board Representative (volunteer)
2017 Recording Secretary (elected 2017)
- 2015-present Coordinator MAA EPaDel student paper contest
- 2010-2014 Co-coordinator MAA EPaDel student paper contest
- 2011-2014,
2016-2017 Judge for submissions to Young Mathematicians’ Conference (YMC)
- 2010-2011,
2013, 2015 Judge for MAA Mathfest student paper presentation

CONFERENCE COMMITTEES

- Member of the Organizing Committee for MAA Themed Contributed Paper Session “Inquiry Based Teaching and Learning, I-IV”, MAA-AMS Joint Meetings, San Diego, CA, 12-13 January, 2018
- Member of the Organizing Committee for the Project NExT special session “Publishing in the Scholarship of Teaching and Learning”, Project NExT Workshop prior to MAA Mathfest, Pittsburg, PA, August 4 2010
- Member of the Organizing Committee for the Project NExT special session “Getting Discovery Learning Started”, MAA-AMS Joint Meetings, San Francisco, CA, January 13, 2010

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

American Mathematical Society
Association for Women in Mathematics
Mathematical Association of America
Sigma Xi