# Emille K. Davie

# Curriculum Vitae

Department of Mathematics, University of California, Santa Barbara 6507 South Hall, Santa Barbara, CA 93106-3080 Phone: 805-893-2738, E-mail:<u>davie@math.ucsb.edu</u>, Web: www.math.ucsb.edu/~davie

## **Research Interests**

Braid groups, mapping class groups of surfaces

## **Employment**

**University of California, Santa Barbara** 2007-present Visiting Assistant Professor

## Education

University of Georgia 2001-2007 Doctorate of Philosophy in Mathematics Co-Advisors: William Kazez and Clinton McCrory

## Spelman College

1997-2001 Bachelor of Science in Mathematics

## Honors and Publications

"Characterizing right-veering homeomorphisms of the punctured torus via the Burau Representation" arXiv: 0804.4694v2, submitted for publication

UCSB Department of Mathematics Mochizuki Teaching Award, 2009 UGA Department of Mathematics Outstanding Graduate Teaching Award, 2007 Southern Regional Education Board Dissertation Fellowship Award, 2006 University of Georgia Outstanding Graduate Student Instructor Award, 2005 Ford Foundation Pre-Doctoral Fellowship Honorable Mention, 2003 VIGRE Fellowship 2001, 2003, 2005

## **Conference** Talks

AMS Fall Western Section Meeting; Riverside, CA, November 2009 Special Session on Knotting Around Dimension Three: A Special Session in Memory of Xiao-Song Lin, I

#### SACNAS National Conference; Dallas, TX, October 2009

New Methods in Topology and Quantum Geometry Session

#### Promoting Diversity at the Graduate Level: A National Forum, Oct. 2008

"A Diversity of Careers in Mathematics", panelist Mathematical Sciences Research Institute; Berkeley, California

#### **AMS-MAA Joint Mathematics Meetings; San Diego, California, January 2008** NAM Granville-Browne-Hayes Session

MAIN Granvine-Browne-Hayes Session

## AMS-MAA Joint Mathematics Meetings; New Orleans, LA, January 2007

Mapping Class Groups and Handlebodies AMS Special Session

### Selected Seminar Talks

California Institute of Technology, May 2009 Westmont College, March 2009 Pomona College, March 2009 Loyola Marymount University, February 2009 California State University, Channel Islands, Nov. 2008 University of Southern California, Feb. 2008 Emory University, April 2007 Louisiana State University, Jan. 2007

## **Professional and Service Activities**

Faculty Mentor for McNair Scholars Program, July 2009-present
Postdoctoral Mentor for MSRI-UP 2009: Coding Theory, June-July 2009
Program Committee member for the 2010 Infinite Possibilities Conference
Co-organizer of the University of Georgia VIGRE seminar, 2006-2007
Program Mentor for Enhancing Diversity in Graduate Education program, June 2006

## Teaching

Visiting Assistant Professor, University of California, Santa Barbara MATH 116: Combinatorial Analysis, Fall 2009
MATH 227C: Topics in Topology (Braid groups and Artin groups), Spring 2009
MATH 3H/5H: Calculus/Advanced Calculus Honors Seminar, 2008-09
MATH 8: Introduction to Higher Mathematics, Winter 2008
MATH 113: Non-Euclidean Geometry, Fall 2007 and Fall 2008
MATH 145: Introduction to Topology, Spring 2008
MATH 3A: Calculus with Applications I, Spring 2008
MATH 3B: Calculus with Applications II, Winter 2008

#### Graduate Student Instructor, University of Georgia

GRSC 7770: Seminar for Graduate Teaching Assistants, Fall 2006 MATH 8205: Topology Problem Solving Session, Spring 2006 MATH 2200: Differential Calculus, Spring 2005, Fall 2004, and Spring 2003 MATH 2200L: Differential Calculus Maple Lab, Spring 2005 MATH 7900: Foundations for Graduate Mathematics (Teaching Assistant), Fall 2004 MATH 1113: Precalculus, Fall 2002

#### Selected Professional Meetings and Conferences Attended

2009 Georgia International Topology Conference, May 2009

University of Georgia; Athens, GA

#### Low Dimensional Topology, August 2008

In honor of Robion Kirby's 70th birthday Mathematical Sciences Research Institute; Berkeley, CA

#### Women and Mathematics Program, May 2008

Institute for Advanced Study; Princeton, NJ

#### Introduction to Geometric Group Theory, Aug. 2007

Mathematical Sciences Research Institute; Berkeley, CA

#### **Institute on Teaching and Mentoring, Oct. 2006** Miami, Florida

**Infinite Possibilities Conference, April 2005** Spelman College; Atlanta, Georgia

## Braids, Links, and Mapping Class Groups, Mar. 2005

In honor of Joan Birman Columbia University; New York, NY

#### Knot Theory and 3-Manifolds Summer School, July 2004

University of British Columbia; Vancouver, British Columbia

### **Professional Memberships**

American Mathematical Society National Association of Mathematicians Association for Women in Mathematics Spelman College Alumni Association Jackie Robinson Foundation Alumni Association