

Kelly L. McKinnie, Curriculum Vitae

CONTACT INFORMATION

Rice University
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EDUCATION

Ph.D. Mathematics, May 2006

University of Texas at Austin, Austin, Texas USA

- Dissertation Title: “Noncyclic and Indecomposable p -Algebras”
- Academic Advisor: David J. Saltman

BS Mathematics, May 1999

University of Missouri at Columbia, Columbia, Missouri USA

- Graduated Summa Cum Laude.

RESEARCH INTERESTS

My research interests include finite dimensional division algebras, p -algebras, indecomposable division algebras, valued division algebras, Severi-Brauer varieties, algebraic K -theory and algebraic geometry.

ACADEMIC EXPERIENCE

G.C. Evans Instructor & NSF Post-doctoral Fellow, Rice University, Fall 2007 – Present.

NSF Post-doctoral Fellow, Emory University, Fall 2006 – Summer 2007.

Graduate Student, University of Texas at Austin, Fall 1999 – Spring 2006.

Directors Summer Program, NSA, Ft. Mead, Maryland, Summer 1999.

Participated in a selective summer program designed for undergraduate students planning on attending graduate school in mathematics.

TEACHING EXPERIENCE

G.C. Evans Instructor, Rice University

Math 365, Number Theory, Fall 2007.

Math 111, Fundamental Theorem of Calculus, Fall 2007.

Assistant Instructor, University of Texas at Austin

Emerging Scholars Program, calculus workshop leader, Fall 2005.

Graduate Student Coordinator, Saturday Morning Math Group, Fall 2003-Spring 2004.

Coordinated the “Saturday Morning Math Group”, a University of Texas, Department of Mathematics outreach program.

Assistant Instructor, University of Texas at Austin, Fall 2002.

Instructor of record for two precalculus classes.

Teaching Assistant, University of Texas at Austin, Fall 2000-Summer 2002.

Supplemental Instruction, University Learning Center, Fall 2001-Spring 2002.

Led a specially modified calculus section which integrated relevant learning strategies with review of material.

AWARDS AND
HONORS

NSF Mathematical Sciences Postdoctoral Research Fellowship, Awarded February 2006.
Emory University and Rice University

Frank Gerth III Dissertation award, Spring 2006.

Awarded by the Department of Mathematics, University of Texas at Austin.

University Tuition Fellowship, Fall 2005 - Spring 2006.

Awarded a University Tuition Fellowship from the Office of Graduate Studies, University of Texas at Austin.

NSF VIGRE Trainee, Fall 2004 - Summer 2005.

Awarded a continuing VIGRE traineeship for the academic year 2004-2005.

Outstanding Teaching Award, Fall 2003.

University of Texas, Department of Mathematics, awarded for undergraduate instruction by a graduate student.

Professor and Mrs. Hubert S. Wall Endowed Presidential Fellowship, Fall 2003.

Research Internship Recipient, Fall 1999 - Spring 2000.

Received research internship from the Graduate School at The University of Texas at Austin. Included full support for academic year.

CONFERENCE AND
SEMINAR TALKS

Torsion in CH^2 and indecomposable p -algebras
Algebra Seminar, Emory University, October 2007.

Noncyclic and Indecomposable p -algebras

Linear Algebraic Groups and Cohomology conference, Emory University, May, 2007.

Life after graduate school; applying for jobs and fellowships in your last year
AWM student chapter meeting, Emory University, May, 2007.

Noncyclic and Indecomposable p -algebras

Algebra Seminar, University of Georgia, April, 2007.

Noncyclic and Indecomposable p -algebras

Algebra Seminar, University of California San Diego, April, 2007.

Noncyclic and Indecomposable p -algebras

Algebra Seminar, Emory University, September 2006.

Noncyclic p -algebras

Algebraic Geometry Seminar, Rice University, Houston, TX, February 2006.

Indecomposable p -algebras

AGANT Seminar, University of Texas at Arlington, Arlington, TX, January 2006.

Indecomposable p -algebras

AMS Special Session on Division Algebras, Galois Theory, Cohomology and Geometry, San Antonio, TX, January 2006.

Panelist, *Life in Graduate School*

Texas Undergraduate Mathematics Conference, Sam Houston State University, Huntsville, TX, October, 2005.

<p>CONFERENCE AND SEMINAR TALKS CONTINUED</p>	<p><i>Extensions of Noncyclic p-Algebras with an Application to Indecomposable Division Algebras</i> AWM Workshop: Poster Session with Presentations from Women Recent Ph.D.s and Graduate Students, Atlanta, Georgia, January 2005.</p> <p><i>Noncyclic and Indecomposable p-Algebras</i> The 2004 Brauer Group Conference at Pingree Park, Pingree Park, Colorado, June 2004.</p>
<p>SERVICE</p>	<p><i>Chair of the colloquium committee</i>, Rice University, Department of Mathematics, 2007–2008.</p> <p><i>Seminar Organizer</i>, Algebraic Geometry Seminar, Rice University, 2007–2008.</p> <p><i>Oral exam committee member</i>. Serving on an oral exam committee for a graduate student at Rice University, 2007–2008.</p> <p><i>Preliminary exam committee</i>. Serving on the committee which writes the written preliminary exam in graduate algebra for graduate students at Rice University, 2007–2008.</p> <p><i>Women in Math at Rice</i>. Activities co-organizer, 2007–2008.</p> <p><i>Explore UT</i>. Coordinated mathematics activities for a one day, university wide, community outreach event, February 2004.</p> <p><i>Expanding Your Horizons</i>. Gave presentations to area middle school girl scouts on mathematics, March 2001 and March 2002.</p> <p><i>Seminar Organizer</i>, Junior algebra weekly seminar for graduate students at the University of Texas, Fall 2004 – Spring 2005.</p> <p><i>Volunteer</i>, Saturday Morning Math Group. Fall 2004 – Spring 2006.</p>
<p>COMPUTER EXPERIENCE</p>	<p>Mathematical Packages: Mathematica, Pari and Magma.</p> <p>Operating Systems: Unix/Linux, Windows, Mac OS.</p>
<p>MATHEMATICAL ORGANIZATIONS</p>	<p>American Mathematical Society, member.</p> <p>Association for Women in Mathematics, member.</p>
<p>REFERENCES</p>	<p>Professor David J. Saltman, dissertation advisor, University of Texas at Austin & CCR Princeton.</p> <p>Professor Parimala Raman, Emory University.</p> <p>Professor Adrian R. Wadsworth, University of California, San Diego.</p> <p>Professor Eric Brussel, Emory University.</p> <p>Professor Tim Cochran, Rice University. (teaching)</p>

RECENT
CONFERENCES
ATTENDED

Linear Algebraic Groups and Cohomology, Emory University, May 2007.
Rational Curves on Algebraic Varieties, AIM Institute, Palo Alto, CA, May 2007.
TAGS, University of Texas at Austin, March 2007.
AMS regional meeting, Davidson, NC, March 2007.

CONFERENCES
CO-ORGANIZED

The Brauer group, Pingree Park Colorado (tentatively schedule for July 2008).
AMS Special Session on Division Algebras, Galois Theory, Cohomology and Geometry, San Antonio, TX, January 2006. Together with David J. Saltman.

PUBLICATIONS

Kelly McKinnie. Indecomposable p -algebras and Galois Subfields in generic abelian crossed products. To appear in *Journal of Algebra*. (arXiv:0705.3860v1)

Kelly McKinnie. Prime to p extensions of the generic abelian crossed product. *Journal of Algebra*, 317(2): 813–534, 2007.

Kelly McKinnie. Noncyclic and indecomposable p -algebras. *Ph.D. Thesis, University of Texas at Austin*, May 2006.