

Curriculum Vitae

ADAM GLESSER

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Education/Employment

- 2009 – Pres. **Assistant Professor**, Suffolk University
2008 – 2009. **Visiting Assistant Professor**, Suffolk University
2008 Spring **MSRI Postdoc**, Mathematical Sciences Research Institute
Mentor: Markus Linckelmann
2006 – 2008 **Research Fellow**, University of Aberdeen
Supervisor: Geoffrey Robinson
2002 – 2006 **Assistant Instructor**, COSMOS, University of California, Santa Cruz
2001 – 2006 **Ph.D. in Mathematics**, University of California, Santa Cruz
Advisor: Robert Boltje
Thesis: “Refinements of Dade’s Projective Conjecture”
2000 – 2001 **M.A. in Mathematics**, University of California, Santa Cruz
1996 – 2000 **B.A. in Mathematics, Economics, Politics**, University of California, Santa Cruz
Thesis: “On the Simplicity of Certain Finite Groups”

Academic Honors and Grants

- 2008 Spring Postdoctoral Fellowship, MSRI
2006 – 2008 Postdoctoral Fellowship, University of Aberdeen
2005 – 2006 Marcia & Harold Messmer Scholar, ARCS Foundation
2001 – 2004 GAANN (Graduate Assistance in Areas of National Need) Grant
2001 Spring Mathematics Department Fellowship, University of California, Santa Cruz
2000 Triple Major with College Honors, Economics Honors, University of California, Santa Cruz

Research interests

Representation Theory of Finite Groups, Fusion Systems, Algebraic Topology

Publications and Preprints

Articles in progress

1. *Yoshida’s Theorem and Tate’s Theorem on Control of Transfer for Fusion Systems* (with Antonio Daz, Sejong Park, Radu Stancu)
2. *Fusion Systems on Small p -Groups* (with David Craven).

Submitted journal articles

3. *Sparse Fusion Systems*, submitted to Proceedings of the Edinburgh Mathematical Society.

Peer-reviewed journal articles

- 2009 4. *Control of Transfer in Fusion Systems* (with Antonio Díaz, Nadia Mazza, Sejong Park), to appear in Journal of Algebra.
5. 2009 *Glauberman’s and Thompson’s Theorems for Fusion Systems* (with Antonio Díaz, Nadia Mazza, Sejong Park), Proceedings of the American Mathematical Society, **137** (2009), 495-503.
2007 6. *Some Refinements of Dade’s Projective Conjecture*, Journal of Algebra, **318** (2007), 692-709.
7. *On p -Monomial Modules Over Local Domains* (with Robert Boltje), Journal of Group Theory, **10** (2007), no. 2, 173-183.

Professional activities

Review activities

2009–Present Reviewer for Mathematical Reviews

Seminars Organized

2006–2007 Algebra seminar (University of Aberdeen)

2007 Fall Postdoctoral seminar on "*ZJ-Theorems for Fusion Systems*" (University of Aberdeen)

Spring Postdoctoral seminar on "*Extensions of Nilpotent Blocks*" (University of Aberdeen)

Conferences Attended

2009 June Attended the conference on "Algebraic Topology, Group Theory and Representation Theory" (Isle of Skye)

Speaker at the conference on "Character Theory of Finite Groups" (Universitat de Valencia)

2008 Dec. Invited speaker at the workshop "Local Methods in Fusion System" (University of Copenhagen).

Spring Participant in the MSRI program "Representation Theory of Finite Groups and Related Topics".

Mar. Attended the conference "On the Local And Global Analysis of Groups and Related Objects" (University of Chicago).

2007 Aug. Participated in the LMS/EPSRC Short Course on Fusion Systems (University of Birmingham).

2005 Oct. Attended the Sixth Century Conference in Representation Theory (University of Aberdeen).

2002-2005 Participated (with talks) in six International Collaborative Research Seminars with the University of Jena, Germany. Under the direction of Burkhard Külshammer and Robert Boltje, the group studied:

- The representation theory of the symmetric groups.
- Dade's theory of endo-permutation modules over p -groups.
- Puig's structure theorem for nilpotent blocks, Dade's theory of blocks with cyclic defect groups.
- Alperin's conjecture and Dade's conjecture.
- Representation rings and the induction theorems of Artin, Brauer, Conlon and Dress.
- Glauberman's theorem on weakly closed involutions in 2-Sylow subgroups.

2003 Mar. Attended the conference "Finite Groups" (University of Florida, Gainesville).

Attended the AMS Sectional Special Session on Induced Representations (Louisiana State University).

Selected Talks

2009 June **Sabhla Mòr Ostaig** (Conference): *Fusion and a Result of Navarro*

Feb. **Suffolk University** (Center for Teaching Excellence, Teaching and Technology Series): *Painless Web Page Design for the Classroom*

2008 Dec. **University of Copenhagen** (Workshop): *Sparse Fusion Systems*

Oct. **Suffolk Univ.** (Suffolk University Mathematics Society): *Prime Numbers and the Riemann Hypothesis*

Oct. **Suffolk Univ.** (Faculty/Student Workshop): *L^AT_EX in the Classroom*

- Oct. **Suffolk Univ.** (Suffolk Mathematics Seminar): *Conjectures in the Representation Theory of Finite Groups*
- May **Suffolk Univ.** (Invited Research Talk): *Blocks and Fusion Systems for Finite Groups*
- Apr. **MSRI** (Postdoctoral Seminar): *Some Fuss About Fusion*
- 2007 Nov. **U. Aberdeen** (Algebra Seminar): *Dade's Conjecture and Some Refinements*
- Nov. **U. Aberdeen** (Math Club): *Surreal Numbers*
- May **U. Aberdeen** (Postdoctoral Seminar): *Induction of Algebras and Applications*
- May **U. Aberdeen** (Postdoctoral Seminar): *Nilpotent Blocks and Pointed Groups*
- Mar. **U. Aberdeen** (Postdoctoral Seminar): *Brauer Pairs and Source Algebras*
- 2006 Nov. **U. Aberdeen** (Postdoctoral Seminar): *Block Theory for the Lazy*
- June **UC Santa Cruz** (Algebra Seminar): *Refinements of Dade's Projective Conjecture*
- Mar. **UC Santa Cruz** (Undergraduate Colloquium): *The Secrets of Sudoku*
- 2005 Mar. **U. Jena** (International Collaborative Research Seminar): *A Specht Series for Permutation Modules*
- 2004 Sep. **UC Santa Cruz** (ICRS): *p-Nilpotent Groups*
- Mar. **UC Santa Cruz** (Graduate Colloquium): *Nilpotent Blocks*
- Mar. **U. Jena** (ICRS): *Brauer Pairs*
- 2003 Dec. **UC Santa Cruz** (Algebra Seminar): *Rationality Questions in Modular Representation Theory*
- Dec. **UC Santa Cruz** (Undergraduate Colloquium): *Structure and Method in Mathematics*
- Feb. **UC Santa Cruz** (ICRS): *The Joy of Subpairs*
- 2002 Oct. **UC Santa Cruz** (Graduate Colloquium): *Induction Theorems*
- Sep. **UC Santa Cruz** (ICRS): *The Trivial Source Ring*
- Sep. **UC Santa Cruz** (ICRS): *Representation Rings and Grothendieck Rings*
- Aug. **U. Jena** (ICRS): *Blocks*
- Aug. **U. Jena** (ICRS): *Induced Characters*
- Jan. **UC Santa Cruz** (Undergraduate Colloquium): *An Introduction to Representation Theory*

Teaching activities

Suffolk University, 2008–Present

Instructor

Teaching undergraduate courses from Calculus to Complex Analysis. Responsibilities include designing the course syllabus, lectures, exams, homework assignments, and grading rubric. Additionally, I designed course webpages containing videos of each lecture, lecture summaries, real-time grades, a discussion board and a file archive.

- 2009 Fall Multivariable Calculus
 Honors Calculus Seminar II
 Advanced Honors Seminar (Cryptography)
 Complex Analysis
- Summer Connections 2 College: Introduction to Precalculus
- Spring Calculus II
 Honors Calculus Seminar I
 Honors Calculus Seminar II
- 2008 Fall Calculus I
 Honors Calculus Seminar II

University of Aberdeen, 2006–2007

Instructor

Co-taught undergraduate courses in Calculus, Engineering, and General Science. Shared responsibility for designing the course syllabus, lectures, exams, homework assignments, and grading rubric.

2007 Fall Engineering Maths
 Tools for Science Quantitative Skills
 2006 Fall Calculus

Teaching Assistant

Duties included holding discussion sections, designing the course syllabus and holding office hours for undergraduate and graduate courses.

2007 Spring Representation Theory of Finite Groups
 2006 Fall Graduate Commutative Algebra and Algebraic Geometry
 Calculus

University of California, Santa Cruz, 1999–2006

Instructor

Designed a course preparing graduate students to pass the algebra preliminary written examination at the end of their first year. Responsibilities included collecting problems, holding discussion meetings and publishing complete solutions online. I also taught an undergraduate course on integral calculus for natural scientists. Responsibilities included designing the course, lectures, exams, homework assignments and grading rubric. Additional responsibilities included supervising teaching assistants, holding office hours, publishing comprehensive course notes online and writing letters of recommendation for students.

2006 Spring Graduate Algebra Preliminary Examination Prep
 2005 Sum. Calculus with Applications
 Spring Graduate Algebra Preliminary Examination Prep
 2001 Sum. Calculus with Applications

Assistant Instructor

Co-taught a course on mathematical logic and the paradoxes of infinity to gifted high school students. Duties included lecturing, after-class mentoring, materials preparation, course design as well as coordinating the production and presentation of the students' final projects.

2002-2006 COSMOS, Logic, Riddles and Paradoxes

Teaching Assistant

Duties included facilitating discussion sections, holding office hours, designing quizzes, and grading homework and exams.

2006 Spring Introduction to Number Theory
 2006 Winter Advanced Linear Algebra
 2005 Spring Ring and Field Theory
 Fall Group Theory
 Winter Group Theory
 2004 Fall Group Theory
 2001 Winter Calculus for Science, Engineering, and Mathematics
 2000 Fall Calculus for Science, Engineering, and Mathematics
 1999 Winter Precalculus

Academic Training

- 2008 Oct. Attended the Suffolk University Center for Teaching Excellence workshop, *Podcasting in the Classroom*. The workshop explored how to effectively use video and audio recording technology to enhance the students' home and classroom experiences.
- Fall Participated in the Suffolk University faculty book club. We read and discussed Thomas B. Jones' novel, *The Missing Professor*. We focused on issues such as student tardiness, absenteeism, late homework and the role of the syllabus.
- Aug. Participated in the Suffolk University Teaching Academy. This included attending workshops on using the Blackboard Content System, syllabus management, using Web 2.0 technology in the classroom as well as a panel discussion on student participation.

Departmental service

Departmental committees (at Suffolk University)

Suffolk University Mathematics Society Advisor (2009–Present): Coordinate the times and topics of society meetings with the president, suggest new activities and supervise ongoing projects

Website (2009–Present): Co-designed and implemented a new departmental web site.

Math Major Support (Spring 2009): The purpose of the committee was to explore ways of improving the perform