Born July 30, 1964 in Seattle, Washington

Citizenship: United States Married, two children

### Education

1986	A.B.	Mathematics	University of California, Berkeley	
1988	M.S.	Mathematics	Yale University	
1989	M.Phil	Mathematics	Yale University	
1990	Ph.D.	Mathematics	Yale University	
Thesis Advisor: George B. Seligman				

Thesis: Projective Modules over Lie Algebras of Cartan Type

### **Employment**

1990–91 Visiting Assistant Professor Auburn University	
1991–95 Visiting Assistant Professor Northwestern University	ersity
1992–95 NSF Postdoctoral Fellow Northwestern University	ersity
1994–98 Assistant Professor Utah State Univers	ity
1998–02 Associate Professor Utah State Univers	ity
2001–03 Associate Professor University of Georg	jia
2003–10 Professor University of Georg	jia
2010- Distinguished Research Professor University of Georg	jia

#### Research Interests

Representation Theory of Algebraic Groups, Quantum Groups, and Lie Superalgebras Categorical and Homological Methods in Representation Theory Cohomology and Support Varieties for Algebraic and Finite Groups Algebraic and Geometric Methods in Lie Theory Monoidal (Tensor) Triangulated Categories

## Visiting Research Positions (with funding)

April 1993	University of Virginia
April 1995	University of Virginia
July 1998	Aarhus University, Denmark
June–July 2002	Visiting Professor, Osaka City University, Japan
Jan–June 2003	EPSRC Research Fellow, Oxford University, England
May 2004	Institute for Mathematical Sciences, University of Virginia
June 2005	Ecole Polytechnique Federale, Lausanne, Switzerland
Jan-June 2006	Visiting Professor, University of Virginia
March 2008	General Member, Mathematical Sciences Research Institute, Berkeley, CA

July 2009 East China Normal University, Shanghai, China

July 2009 Peking University, Beijing, China

Jan-June 2010 Visiting Professor, University of Sydney, Australia March-June 2010 University of New South Wales, Sydney, Australia

April 2010 University of Melbourne, Australia July 2013 Morningside Institute, Beijing, China

May-June 2014 Centre de Recherches Mathematiques (CRM), Montreal, Canada

Feb-March 2015 Mittag-Leffler Institute, Stockholm, Sweden

Feb-March 2018 General Member, Mathematical Sciences Research Institute, Berkeley, CA Visiting Professor, SUSTech Mathematical Institute, Shenzhen, China

April 2023 Visiting Professor, Northeastern University

May-June 2023 Université Clermont Auvergne, Clermont-Ferrand, France

March 2024 Academia Sinica, Taipei, Taiwan March 2024. Peking University, Beijing China

### NSF Individual Research Grants: Principal Investigator

- 1. National Science Foundation Grant DMS-9206284, Mathematical Sciences Postdoctoral Research Fellowship, 1992-95, \$75,000
- 2. National Science Foundation Grant DMS-9500715, Cohomology and Representation Theory of Algebraic Groups and Lie Algebras, 1995-98, \$59,050
- 3. National Science Foundation Grant DMS-9800960, Cohomology and Representation Theory: Algebraic Groups, Finite Groups and Lie Algebras, 1998-2001, \$72,900
- 4. National Science Foundation Grant DMS-0136082, Cohomology and Representation Theory: Reductive Algebraic Groups and Related Structures, 2001-04, \$100,995
- 5. National Science Foundation Grant DMS-0400548, Cohomology and Representation Theory, 2004-07, \$118,359
- 6. National Science Foundation Grant DMS-0654169, Cohomological Methods in the Representation Theory of Algebraic Groups, Quantum Groups and Superalgebras, 2007-10, \$159,744
- 7. National Science Foundation Grant DMS-1002135, Cohomology, Geometry and Representation Theory: Algebraic Groups, Quantum Groups and Lie Superalgebras, 2010-13, \$169,976
- 8. National Science Foundation Grant DMS-1402271, Representation Theory, Geometry and Cohomology in Tensor Triangulated Categories, 2014-17, \$158,301
- 9. National Science Foundation Grant DMS-1701768, Representations, Cohomology and Geometry in Tensor Triangulated Categories, 2017-20, \$165,001
- 10. National Science Foundation Grant DMS-2101941, Monoidal Triangular Categories, Representation Theory, Cohomology and Geometry, 2021-24, \$232,374
- 11. National Science Foundation Grant DMS-2401184, Representation Theory and Geometry in Monoidal Triangular Categories, 2024-27, \$255,298

#### **NSF** Workforce Grants

- 1. Co-Principal Investigator on National Science Foundation VIGRE Grant DMS-0089927, Vertical Integration of Research and Educational Activities in Mathematics at the University of Georgia, 2001-06, \$2,451,334
- 2. Principal Investigator on National Science Foundation VIGRE Grant DMS-0738586, Vertical Integration of Research and Education in Mathematics at the University of Georgia, 2008-13, \$3,819,865

#### **NSF** and **NSA** Conference Grants

- 1. Co-Principal Investigator on National Science Foundation Grant DMS-0852373, Southeastern Lie Theory Workshop Series, 2009-11, \$60,000
- 2. Co-Principal Investigator on National Science Foundation Grant DMS-1206255, Southeastern Lie Theory Workshop Series, 2012-14, \$38,750
- 3. Co-Principal Investigator on National Science Foundation Grant DMS-1544407, Southeastern Lie Theory Workshop Series, 2015-17, \$49,488
- 4. Co-Principal Investigator on National Science Foundation Grant DMS-1801804, Southeastern Lie Theory Workshop Series, 2018-21, \$49,970
- 5. Co-Principal Investigator on National Science Foundation Grant DMS-2303977, Southeastern Lie Theory Workshop Series, 2023-25, \$42,500
- 6. Principal Investigator on National Security Agency Conference Grant, Advances in Lie Theory, Representation Theory and Combinatorics, held at SLMath, Berkeley, CA, 2023-25, \$21,850

#### Other Research Grants

1. Utah State University: Faculty Research Grant, Representation Theory of Algebraic Groups and Lie Algebras, 1996-97, \$12,088

## Undergraduate and Graduate Academic Honors/Awards/Recognition

- 1986 Percy Lionel Davis Award (departmental prize), University of California, Berkeley
- 1986 Graduated with Highest Honors in Mathematics, University of California, Berkeley
- 1986- Phi Beta Kappa, University of California, Berkeley (Member, elected 1986)
- 1986–89 Annual Departmental Stipend Prize, Yale University
- 1986–90 Teaching Fellowship, Yale University
- 1987–90 Research Assistantship, Yale University

## University Faculty Academic Honors/Awards/Recognition

1999-00	Researcher of the Year, Department of Mathematics and Statistics, Utah St. University		
2007	Creative Research Medal, University of Georgia		
2008	McCay Award (for distinguished research, teaching and service), Department of Math-		
	ematics, University of Georgia		
2010	Distinguished Research Professorship, University of Georgia		
2016	Lamar Dodd Creative Research Award, University of Georgia		

## National and International Academic Honors/Awards/Recognition

1987-	American Mathematical Society, Member (Life Member from 2014-)		
1992 - 95	National Science Foundation Postdoctoral Fellowship		
2007	American Mathematical Society One-Hour Invited Address		
2013-	Fellow of the American Mathematical Society (Class of 2013, Inaugural Class)		
2021-	Association for Mathematical Research, Founding Member		
2024 Representation Theory and Related Geometry: Progress and Prospects at the			
	University of Georgia, Athens, GA (60th birthday conference), funded by NSF, NSA,		
	and a UGA State of the Art Conference Grant		

# Administrative Experience

2000-01	Chair of the Colloquium/Visitor Committee
2000 – 01	MSRI Representative for Utah St. University
2003 – 04	Chair of the Facilities Committee
2004	Co-Director of the University of Georgia VIGRE Program, January-April
2005 – 07	Chair of the VIGRE Grant Writing Committee
2008 – 15	Director of the University of Georgia VIGRE Program
2012 - 13	Chair of the American Mathematical Society Southeastern Section Program Committee
2014-15	Franklin College Faculty Senate President-Elect, University of Georgia
2015-16	Franklin College Faculty Senate President, University of Georgia
2018 – 19	Chair of the American Mathematical Society Program Committee for the National Meetings
2019-20	Vice Chair of the Executive Committee
2022 - 23	Vice Chair of the Executive Committee
2023-24	Vice Chair of the Executive Committee

### Membership on Editorial Boards

- 2005–10 Editor for Communications in Algebra
- 2010–23 Editor for the Journal of Pure and Applied Algebra
- 2023–27 Editor for the Transactions of the American Mathematical Society
- 2005–06 Editor for the Proceedings of the 2004 AMS Summer Research Institute Conference: Representations of Algebraic Groups, Quantum Groups and Lie Algebras
- 2011–12 Editor for the Proceedings of the Southeastern Lie Theory Workshop Series I (2009-11)
- 2014–15 Editor for the Proceedings of the Southeastern Lie Theory Workshop Series II (2012-14)
- 2022–23 Editor for the Proceedings of the Southeastern Lie Theory Workshop Series III (2015-21)

### Service on Departmental Committees: Utah State

- 1995–96 Colloquium Committee, Search Committee
- 1996–97 Colloquium Committee, Search Committee, Graduate Committee
- 1997–98 Colloquium Committee, Graduate Committee
- 1998–99 Colloquium Committee, Graduate Committee
- 1999–00 Undergraduate Committee, Colloquium/Visitor Committee, Honors Committee
- 2000–01 Colloquium/Visitor Committee, Honors Committee

### Service on Departmental Committees: Georgia

- 2001- Hiring Committee [Tenure-Track and Postdoctoral Positions]
- 2002–04 Facilities Committee
- 2004–06 Executive Committee
- 2006–07 Personnel Committee
- 2007–08 Graduate Committee
- 2008-15 VIGRE Management Committee
- 2009 McCay Award Selection Committee
- 2009-10 Cantrell Lecture Series Committee
- 2009-11 Executive Committee
- 2015 McCay Award Selection Committee
- 2015-16 Cantrell Lecture Series Committee
- 2017 McCay Award Selection Committee
- 2018-19 Cantrell Lecture Series Committee
- 2018-20 Executive Committee (Secretary: 2018-19)
- 2019 McCay Award Selection Committee
- 2021 McCay Award Selection Committee
- 2022-24 Executive Committee
- 2023 McCay Award Selection Committee

### University Service: Georgia

- 2011–15 Office for the Vice President for Research (OVPR) Advisory Council
- 2012–13 Franklin College of Arts and Sciences Special Professorship Selection Committee
- 2013–14 Franklin College of Arts and Sciences Special Professorship Selection Committee (Chair)
- 2012–15 Member of the Franklin College of Arts and Sciences Faculty Senate (first term)
- 2012–14 Member of the Franklin College Faculty Affairs Committee
- 2015–18 Member of the Franklin College of Arts and Sciences Faculty Senate (second term)
- 2016–21 Franklin College of Arts and Sciences Special Professorship Selection Committee
- 2017–19 Chair of the Franklin College of Arts and Sciences Special Professorship Selection Committee
- 2016–19 Office for the Vice President for Research (OVPR) Research Awards Selection Committee
- 2020-22 University Program Review and Assessment Committee (PRAC)
- 2020-21 Program Review Committee for the Computer Science Department (Chair)
- 2020-21 Program Review Committee for the Entomology Department
- 2021-22 Program Review Committee for the Plant Biology Department
- 2024- Franklin College of Arts and Sciences Committee on Fellows and Major Awards

#### National and International Service

- 2009– Scientific Committee, Southeastern Lie Theory Network
- 2011–13 American Mathematical Society Southeastern Section Program Committee
- 2011–13 American Mathematical Society Committee on Committees
- 2014 Chair of an Invited Address Session (Algebra) at the International Congress of Mathematicians
- 2017–20 American Mathematical Society, Program Committee for the National Meetings

### Service as a Conference Organizer: Major Conferences

- 1997 Organizer for the Minisymposium on Lie Theory, Matrix Theory and Combinatorics at the MAA meeting in Logan, UT
- 2002 Organizer for a Workshop on Modular Representation Theory, Korea Institute for Advanced Study, Seoul, Korea
- 2004 Organizer for the AMS Summer Research Conference: Representations of Algebraic Groups, Quantum Groups, and Lie Algebras, Snowbird, UT
- 2008 Chair of the Organizing Committee for a Workshop on Homological Methods in Representation Theory, Mathematical Sciences Research Institute, Berkeley, CA
- 2010 Organizer for the VIGRE Summer School on Lie and Representation Theory (two weeks) University of Georgia, Athens, GA
- 2010 Chair of the Organizing Committee for the Workshop on Lie Theory, Homological Methods and Applications, University of Georgia, Athens, GA
- 2012 Organizer for the Conference on Categorification of Quantum Groups and Representation Theory, North Carolina State University, Raleigh, NC
- 2012 Organizer for the Summer School on Cohomology and Supports in Representation Theory University of Washington, Seattle, WA
- 2014 Chair of the Organizing Committee for the Conference on Representations of Lie Algebras and Superalgebras, University of Georgia, Athens, GA
- 2018 Chair of the Organizing Committee for the RTG Summer School on Lie Theory, University of Georgia, Athens, GA
- 2018 Chair of the Organizing Committee for the Workshop on Representations of Algebraic Groups and Superalgebras, University of Georgia, Athens, GA
- 2020 Organizer for the Workshop on Representation Theory of Algebraic and Quantum Groups, University of Virginia, Charlottesville, VA
- 2021 Organizer for the 12th Southeastern Lie Theory Workshop, College of Charleston, Charleston, SC
- 2024 Organizer for the Workshop on Advances in Lie Theory, Representation Theory and Combinatorics, Simons Laufer Mathematical Sciences Institute, Berkeley, CA

### Service as a Conference Organizer: AMS Special Sessions

- 1994 Special Session on Lie Theory at the 900<sup>th</sup> AMS Meeting in Chicago, IL
- 1998 Special Session on Representation Theory of Algebraic Groups, Quantum Groups, and Lie Algebras at the 932<sup>nd</sup> AMS Meeting in Manhattan, KS
- 2001 Special Session on Representation Theory of Finite and Algebraic Groups at the National AMS Meeting in New Orleans, LA
- 2005 Special Session on Representation Theory of Lie Algebras at the National AMS Meeting in Atlanta, GA
- 2007 Special Session on Cohomology and Representation Theory at the National AMS Meeting in New Orleans, LA
- 2007 Special Session on Lie and Representation Theory at the  $1030^{\rm th}$  AMS Meeting in Murfreesboro, TN
- 2009 Special Session on Representation Theory of Lie Algebras and Algebraic Groups at the National AMS Meeting in Washington D.C.
- 2011 Special Session on Lie Algebras, Algebraic Groups and Related Topics at the National AMS Meeting in New Orleans, LA
- 2016 Special Session on Representation Theory of Algebraic Groups at the National AMS Meeting in Seattle, WA
- 2016 Special Session on Lie Theory, Representation Theory and Geometry at the 1117  $^{\rm th}$  AMS Meeting in Athens, GA
- 2017 Special Session on Representations of Lie Algebras at the Congress of the Americas in Montreal, Canada
- 2017 Special Session on Categorical Methods in Representation Theory at the  $1133^{\rm rd}$  AMS Meeting in Orlando, FL
- 2019 Special Session on Homological Methods in the Representation Theory of Groups and Algebras at the Joint Vietnam-USA Mathematical Meeting, Quy Nhon City, Vietnam
- 2020 Special Session on Representation Theory of Algebraic and Quantum Groups: A Tribute to the Work of Cline, Parshall and Scott at the 1155<sup>th</sup> AMS Meeting in Charlottesville, VA (meeting cancelled due to COVID-19)
- 2022 Special Session on Representation Theory of Algebraic and Quantum Groups: A Tribute to the Work of Cline, Parshall and Scott at the 1175<sup>th</sup> AMS Meeting in Charlottesville, VA (meeting cancelled due to Omicron)
- 2023 Special Session on Representation Theory of Algebraic and Quantum Groups: A Tribute to the Work of Cline, Parshall and Scott at the 1184<sup>th</sup> AMS Meeting in Atlanta, GA
- 2023 Special Session on Representation Theory of Finite and Algebraic Groups at the 1189<sup>th</sup> AMS Meeting in Mobile, AL
- 2024 Special Session on Representations of Lie Algebras and Lie Superalgebras at the 1196<sup>th</sup> AMS Meeting in San Francisco, CA
- 2024 Special Session on Representation Theory: Lie Theory and Geometry at the Joint International AMS-UMI Meeting in Palermo, Italy (Sicily)

#### Service as a Reviewer

1991-	Refereeing duties for numerous journals
1992 – 06	Reviewer for Mathematical Reviews
1996-	Reviewer for NSA grant proposals (including service on NSA Panels)
1997-	Reviewer for NSF grant proposals (including service on 9 NSF Proposal Review Panels)
2000-	Reviewer for NSERC grant proposals
2011	Reviewer for Simons Collaboration Grants in Mathematics

#### Other Professional Activities

- Consultant for the American Association for the Advancement of Science (AAAS)
- 2023 Co-author for Remembering Georgia Benkart, Notices of the AMS, Volume 70, Number 3, 420-433.

### Service on Thesis Committees

- 2001 Cora Neal, Utah State University, Ph.D Committee 2001 Russel Carlson, Utah State University, Ph.D Committee 2007 G. Michael Guy, University of Georgia, Ph.D Committee 2007 Emille K. Davie, University of Georgia, Ph.D Committee 2007 Philip Bergonio, University of Georgia, M.A. Committee 2008 Kenyon Platt, University of Georgia, Ph.D Committee 2009 Jeremiah Hower, University of Georgia, Ph.D Committee Benjamin Wyser, University of Georgia, Ph.D Committee 2012 2012 Wenjing Li, University of Georgia, Ph.D Committee Patrick McFaddin, University of Georgia, Ph.D Committee 2016 2016 Maren Turbow, University of Georgia, Ph.D Committee Matthew Zawodniak, University of Georgia, Ph.D Committee 2016 Jonathan Gruber, Ecole Polytechnique Federale de Lausanne, Switzerland, External Examiner 2022
- 2023 John Wagner, University of Georgia, Ph.D Committee

### Service as a Secondary Ph.D Advisor

- 1991–93 Joseph P. Gottman, Northwestern University, Secondary Ph.D Thesis Advisor Thesis: Characters on Restricted Lie Algebras
- 1993–95 Christopher P. Bendel, Northwestern University, Secondary Ph.D Thesis Advisor Thesis: Support Varieties for Infinitesimal Algebraic Groups
- 2010–13 Tiago Macedo, Universidade Estadual de Campinas, Co-Ph.D Thesis Advisor Thesis: Characters and Cohomology of Modules for Kac-Moody Algebras and Generalizations
- 2019-21 Kent B. Vashaw, Louisiana St. University, Secondary Ph.D Thesis Advisor Thesis: Noncommutative Tensor Triangular Geometry and its Applications to Representation Theory

### Service as a Major Ph.D Advisor

- 2004–08 Bobbe J. Cooper, University of Georgia, Ph.D Thesis Advisor
  - Thesis: Support Varieties of Tilting Modules
- 2005–08 Caroline B. Wright, University of Georgia, Ph.D Thesis Advisor Thesis: Second Cohomology Groups of Frobenius Kernels
- 2005–09 Irfan Bagci, University of Georgia, Ph.D Thesis Advisor Thesis: Cohomology and Support Varieties for Lie Superalgebras
- 2009–12 Nham V. Ngo, University of Georgia, Ph.D Thesis Advisor

  Thesis: Cohomology and Geometry for Frobenius Kernels of Algebraic Groups
- 2012–14 Andrew Talian, University of Georgia, Ph.D Thesis Advisor
- Thesis: Endotrivial Modules for Classical Lie Superalgebras
- 2012–15 Theresa Brons, University of Georgia, Ph.D Thesis Advisor Thesis: Rational and Line Bundle Cohomology for Reductive Algebraic Groups
- 2012–16 William Hardesty, University of Georgia, Ph.D Thesis Advisor Thesis: On Support Varieties for Algebraic Groups
- 2015–19 Ziqing Xiang, University of Georgia, Ph.D Thesis Advisor Thesis: Representation Theory for Schur and Hecke Algebras of Classical Type
- 2016–19 Andrew Maurer, University of Georgia, Ph.D Thesis Advisor Thesis: Cohomology and Support Varieties for Classical Lie Superalgebras
- 2018-22 L. Andrew Jenkins, University of Georgia, Ph.D Thesis Advisor Thesis: The Nilpotent Cone for Classical Simple Lie Superalgebras
- 2019-22 David Galban, University of Georgia, Ph.D Thesis Advisor Thesis: Cohomology and Representation Theory for Lie Superalgebras
- 2022- Matthew Hamil, University of Georgia, Ph.D Thesis Advisor
- 2023- Gabriel Loos, University of Georgia, Ph.D Thesis Advisor

#### Service as a Postdoctoral Research Advisor

- 2001–03 David Hemmer, University of Georgia, Senior Sponsoring Scientist for NSF Postdoctoral Fellow
- 2003–06 Nadia Mazza, University of Georgia, Postdoctoral Research Advisor
- 2004–07 Jonathan Kujawa, University of Georgia, Senior Sponsoring Scientist for NSF Post-doctoral Fellow
- 2008–10 Benjamin Jones, University of Georgia, Postdoctoral Research Advisor
- 2009–12 Christopher Drupieski, University of Georgia, Postdoctoral Research Advisor
- 2015–18 Paul Sobaje, University of Georgia, Postdoctoral Research Advisor
- 2017–20 Chun-Ju Lai, University of Georgia, Postdoctoral Research Advisor
- 2020–21 Arik Wilbert, University of Georgia, Postdoctoral Research Advisor
- 2022–25 Tekin Karadag, University of Georgia, Postdoctoral Research Advisor

### Service as a Postdoctoral Teaching Advisor

- 2004–05 Su-ion Ih, University of Georgia, Postdoctoral Teaching Advisor
- 2014–17 Abbey Bourdon, University of Georgia, Postdoctoral Teaching Advisor
- 2016–19 Kyle Chapman, University of Georgia, Postdoctoral Teaching Advisor
- 2019–22 Joseph Hoisington, University of Georgia, Postdoctoral Teaching Advisor

#### Other Advising

- 1995–96 Amanda Brown, Utah St. University, Senior Honors Thesis Advisor
- 1999–00 Kady Schneiter, Utah St. University, Masters Thesis Advisor
- 2017-19 Nikolay Grantcharov (undergrad at U.C. Berkeley), Undergraduate Research Internship Advisor
- 2017-19 Jerry Wu (undergrad at U.C. Berkeley), Undergraduate Research Internship Advisor
- 2020-21 Nathan Wenger (undergrad at U.C. Berkeley), Graduate School Application Advisor
- 2020-21 Hank Morris (undergrad at the University of Georgia), Graduate School Application Advisor
- 2023- Nate Harman, Pre-Tenure Advisor

### Visiting Scholars Hosted

2010–11 Tiago Macedo, Universidade Estadual de Campinas, Brazil, Ph.D Exchange Stude	ent
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- Aug-Dec 2013 Tobias Kildetoft, Aarhus University, Denmark, Ph.D Exchange Student
- Jan-May 2014 Cornelius Pillen, University of South Alabama, Visiting Professor
- Jan 2018 Nadia Mazza, Lancaster University, UK, Visiting Professor
- Oct-Dec 2023 Jonathan Gruber, University of York, UK, Postdoctoral Research Scholar

#### Lectures

1989 Algebra Seminar, Yale University, May

1990 Algebra Seminar, Yale University, April

Algebra Seminar, Auburn University, October

Algebra Seminar, University of Washington, December

1991 Algebra Seminar, North Carolina St. University, March

Algebra Seminar, Auburn University, April

Algebra Seminar, University of Washington, August

1992 Algebra Seminar, Northwestern University, February

Algebra Seminar, Yale University, April

Lie Theory Seminar, University of Wisconsin, Madison, April

Conference on the Structure and Representation Theory of Lie Algebras, Yale University, April

Conference on Connections between Topology and Representation Theory, Northwestern University, May

Algebra Seminar, University of Washington, August

1993 Midwest Group Theory Seminar, University of Chicago, March

Colloquium, Auburn University, March

Colloquium, University of Georgia, March

Algebra Seminar, University of Virginia, March, April

Colloquium, Johns Hopkins University, April

Algebra Seminar, Yale University, April

III International Conference on Non-associative Algebra and its Applications, University of Oviedo, Spain, July

1994 Algebra Seminar, University of Washington, January

Colloquium, Kansas St. University, January

Algebra Seminar, Kansas St. University, January

Colloquium, Michigan St. University, February

Series of four lectures on Representations of Algebraic Groups and Lie Algebras, Queens University, Kingston, Ontario, Canada, February

Colloquium, Utah St. University, March

890<sup>th</sup> AMS Meeting at Kansas St. University, Special Session on Representations of Algebraic and Quantum Groups, March

Algebra Seminar, Northwestern University, April

1994 Algebra Seminar, University of Florida, April

Contributed Talk, Canadian Mathematical Society Conference on Representations of Groups and Algebras, Banff, Canada, June

895<sup>th</sup> AMS Meeting at Oklahoma St. University, Special Session on Representations of Algebraic Groups, October

Lie Theory Seminar, University of Wisconsin, Madison, December

1995 897<sup>th</sup> AMS Meeting at San Francisco, CA, Special Session on Cohomology of Finite Groups, January

Symposium on Lie Algebras and their Representation Theory, Invited Lectures (2), Seoul National University, Korea, January

Algebra Seminar, Northwestern University, February

Topology Seminar, Northwestern University, March

Colloquium, University of Windsor, April

Algebra Seminar, University of Virginia, April

1996 908<sup>th</sup> AMS Meeting in Orlando, FL, Special Session on Algebra, Cohomology and Polynomial Identities, January

Colloquium, Kansas St. University, March

Algebra Seminar, Northwestern University, April

911<sup>th</sup> AMS Meeting in Baton Rouge, LA, Special Session on Representations of Finite Groups, Algebraic Groups and Lie Algebras, April

Monster/Lie Algebra Conference at the Ohio St. University, Invited Talk, May

Conference on Combinatorial Matrix Theory at Utah St. University, May

AMS Summer Research Institute at Seattle, WA, Plenary Talk, July

1997 Colloquium, University of Wyoming (sponsored by the Rocky Mountain Consortium), March

Representation Theory Seminar, University of Utah, March

MAA Special Session on Lie Theory, Matrix Theory and Combinatorics, Utah St. University, April

Algebra Seminar, Oxford University, June

Representation Theory Seminar, Oxford University, June

AMS Summer Research Conference at Seattle, WA, July

1998 932<sup>nd</sup> AMS Meeting in Manhattan, KS, Special Session on Cohomology of Finite Groups, March

Algebra Seminar, Northwestern University, April

Group Theory Seminar, University of Chicago, April

Lie Theory Seminar, University of Wisconsin, Madison, April

Representation Theory Seminar, Princeton University, May

Symposium on Modular Representations of Finite Groups, University of Virginia, May

Algebra Seminar, University of Washington, May

Colloquium, University of Oregon, May

International Conference on Representation Theory, East China Normal University, Shanghai, China, June

Algebra Seminar, Aarhus University, Denmark, July

Group Theory Seminar, University of Georgia, October

Colloquium, University of South Alabama, (sponsored by NSF EPSCoR program), October

Colloquium, Auburn University, (sponsored by NSF EPSCoR program), October

Algebra Seminar, University of Virginia, December

1999 Algebra Seminar, Yale University, March

U. C. Lie Theory Conference, Invited Talk, University of California, Santa Cruz, April 943<sup>rd</sup> AMS Meeting in Buffalo, NY, Special Session on Representation Theory of Lie Algebras, April

Colloquium, Kansas St. University, June

945<sup>th</sup> AMS Meeting in Melbourne, Australia (joint with Australian Math. Soc.) Special Session on Algebraic Groups and Related Topics, July

2000 Colloquium, University of California, Riverside, March

Group Theory Seminar, University of Chicago, April

953<sup>rd</sup> AMS Meeting in South Bend, IN, Special Session on Representation Theory of Groups and Related Objects, April

Conference on Representation Theory and Computational Algebra, University of Georgia, May

Conference on Cohomology of Finite Groups: Interactions and Applications, Oberwolfach, Germany, July

Special Topics Seminar (2 lectures), Utah St. University, October

Colloquium, University of Georgia, December

2001 962<sup>nd</sup> AMS Meeting in New Orleans, LA, Special Session on Group Cohomology with Applications to Homotopy Theory and Representation Theory, January

Special Topics Seminar, Utah St. University, February

Colloquium, University of Oregon, May

Algebra Seminar, University of Washington, May

International Conference on Representations of Algebraic and Quantum Groups, Kunming, China, July

Group Cohomology and Representation Theory Seminar, University of Georgia, September Colloquium, University of South Alabama, October

Conference on Geometric and Combinatorial Representation Theory, Seoul National University, Seoul, Korea, October  $$_{14}$$ 

2002 Lie Theory Seminar (5 lectures), University of Georgia, January-February, October

Group Cohomology and Representation Theory Seminar, University of Georgia, March

Algebra Seminar, University of Virginia, March

Conference on Lie and Jordan Algebras: their Representations and Applications, Plenary Talk, Guaruja, Brazil, May

AMS Summer Research Conference: Groups, Representations and Cohomology, Plenary Talk, South Hadley, MA, June

Symposium on Algebraic Groups, Invited Lectures (3), Osaka City University, Osaka, Japan, June

980<sup>th</sup> AMS Meeting in Madison, WI, Special Session on Lie Theory, October

Workshop on Modular Representation Theory, Korea Institute for Advanced Study, Seoul, Korea, October

VIGRE Seminar, University of Georgia, November

2003 Algebra Seminar, Oxford University, January

Algebra Seminar, University of Warwick, February

Lie Theory Seminar, University of Warwick, February

Representation Theory Seminar, Oxford University, February

Pure Maths Seminar, University of Bristol, February

Pure Maths Seminar, University of Leicester, March

Workshop of Geometric Representation and Invariant Theory, Plenary Talk, University of Manchester, March

Conference on the Representation Theory of Finite Groups, Oberwolfach Germany, March Algebra Seminar, University of Leeds, April

Bristol-Leicester-Oxford Colloquium, University of Leicester, April

Mini-Workshop on Representations of Algebraic Groups and Lie Algebras, University of Birmingham, May

Infinite Dimensional Lie Theory Workshop, Invited Talk, Fields Institute, Toronto, Canada, July

VIGRE Algebra Seminar, University of Georgia, September, October, November

Lie Theory Seminar, University of Georgia, September

VIGRE Seminar, University of Georgia, October

991<sup>th</sup> AMS Meeting in Chapel Hill, NC, Special Session on Group Cohomology in Algebra and Geometry, October

Conference on Groups, Representations and Galois Theory, in honor of Walter Feit, Invited Talk, Yale University, October

Group Cohomology and Representation Theory Seminar (3), University of Georgia, November

2004 VIGRE Algebra Seminar, University of Georgia, January, February, March

Algebra Seminar, University of Georgia, February, April

Conference on Geometric Representation Theory, Invited Talk, University of Warwick, England, March

Conference on Lie and Jordan Algebras: their Representations and Applications II, Plenary Talk, Guaruja, Brazil, May

Algebra Seminar, University of Virginia, May

Algebra Seminar, University of Washington, July

Conference on Algebraic Cycles, K-theory, and Modular Representation Theory, Plenary Talk, Northwestern University, September

Conference on Interaction of Finite Dimensional Algebras with Other Areas of Mathematics, Banff International Research Station, Banff, Canada, September

Groups-Representations-Cohomology Seminar, Ohio State University, October

2005 1003<sup>rd</sup> AMS Meeting in Atlanta, GA, Special Session on Modular Representation Theory of Finite and Algebraic Groups, January

VIGRE Algebra Seminar, University of Georgia, January, February, September, October

Algebra Seminar (4 lectures), University of Georgia, February, October

International AsiaLink Conference on Algebras and Representations, Plenary Talk, Beijing Normal University, P.R. China, May

Series of Invited Lectures (2), Programme on Group Representation Theory, Bernoulli Centre, Ecole Polytechnique Federale de Lausanne, Switzerland, June

VIGRE Seminar, University of Georgia, August

Conference on Cohomology of Finite Groups: Interactions and Applications, Oberwolfach, Germany, September

1012<sup>th</sup> AMS Meeting in Eugene, OR, Special Session on Representations of Groups and Algebras, November

Algebra Seminar, University of Washington, November

1013<sup>th</sup> AMS Meeting in Taichung, Taiwan, Special Session on Lie Algebra and Representation Theory, December

2006 Conference on Representation Theory of Finite Groups, Oberwolfach, Germany, March Algebra Seminar, University of Virginia, April

Geometric Methods in Representation Theory Seminar, University of North Carolina, April Colloquium, Virginia Tech, April

1018<sup>th</sup> AMS Meeting in San Francisco, CA, Special Session on Lie Algebras and Applications, April

VIGRE Algebra Seminar, University of Georgia, August, September, November

Algebra Seminar, University of Georgia, November

Algebra Seminar, University of Rochester, November

Topology Seminar, University of Rochester, November

2007 1024<sup>th</sup> AMS Meeting in Davidson, NC, Special Session on Geometric and Combinatorial Methods in Representation Theory, March

Algebra Seminar, University of Virginia, March

Shoemaker Distinguished Lecture Series (3 lectures), University of Toledo, April

Conference on Lie Theory, Banff International Research Station, Banff, Canada, May

Algebra and Algebraic Geometry Seminar, University of Washington, June

Algebraic and Geometric Representation Theory Conference, Plenary Talk, Aarhus University, Denmark, June

Conference on Algebras, Representations and Applications Lie and Jordan Algebras, their Representations and Applications - III, Plenary Talk, Brazil, August

Conference on Group Embeddings, Banff International Research Station, Banff, Canada, September

Invited One-Hour Address, American Mathematical Society Fall Sectional Meeting, Murfreesboro, TN, November

2008 Algebra Seminar, University of Georgia, January

Conference on Representation Theory of Finite Dimensional Algebras, Oberwolfach, Germany, February

Homological Methods in Representation Theory Seminar, MSRI, Berkeley, CA, March

Colloquium, University of British Columbia, April

Algebra/Topology Seminar, University of British Columbia, April

Algebra Seminar, Emory University, April

1040<sup>th</sup> AMS-SBM Meeting in Rio de Janeiro, Brazil, Special Session on Lie Algebras and their Applications, June

1043<sup>rd</sup> AMS Meeting in Kalamazoo, MI, Special Session on Computation in Modular Representation Theory and Cohomology, October

1045<sup>th</sup> AMS-SMS Meeting in Shanghai, China, Special Session on Representations of Groups and Algebras, December

2009 Mini-Workshop on Support Varieties, (3 invited lectures), Oberwolfach, Germany, February 1048<sup>th</sup> AMS Meeting in Raleigh, NC, Special Session on Kac-Moody Algebras, Vertex Algebras, Quantum Groups, and Applications, April

Algebra Seminar, University of Virginia, May

Conference on Representation Theory and Lie Theory, Plenary Talk, Isaac Newton Institute for Mathematical Sciences, Cambridge, England, June

Second Summer School on Lie Theory and Representation Theory, Invited Lecture Series (6 lectures), East China Normal University, Shanghai, China, July

Workshop on Lie Theory and Representation Theory, Plenary Talk, East China Normal University, Shanghai, China, July

International Workshop on Algebraic Groups, Quantum Groups and Related Topics, Plenary Talk, Peking University, Beijing, China, July

International Workshop on Quantized Algebras and Physics, Invited Talk, Chern Institute of Mathematics, Nankai University, Tianjin, China, July

National Mathematics Summer School, Peking University, Beijing, China, July

International Workshop on Lie Algebras and Related Topics, Plenary Talk, National Institute for Mathematical Sciences, Daejon, Korea, October

Algebra Seminar, University of Georgia, October

Algebra and Algebraic Geometry Seminar, University of Washington, December

2010 Algebra Seminar (2), University of Sydney, March

Algebra Seminar, University of Melbourne, April

Colloquium, University of New South Wales, June

Fifth International Conference on Representation Theory, Plenary Talk, Xian, China, August VIGRE Algebra Seminar (2), University of Georgia, August-September

1062<sup>nd</sup> AMS Meeting in Syracuse, NY, Special Session on Lie Algebras and Representation Theory, October

Algebra Seminar, University of Georgia, November

Taipei Conference on Representation Theory, Plenary Talk, Academia Sinica, Taipei, Taiwan December

2011 U.C. Lie Theory Workshop, Louisiana State University, February

Colloquium, University of Virginia, March

Mini-workshop on Modular Representations of Symmetric Groups and Related Objects, Oberwolfach, Germany, April

1074<sup>th</sup> AMS Meeting in Lincoln, NE, Special Session on Quantum Groups and Representation Theory, October

Colloquium, Baylor University, October

Colloquium, University of Texas, Arlington, October

1075<sup>th</sup> AMS Meeting in Salt Lake City, UT, Special Session on Noncommutative Geometry and Algebra, October

Southwest Group Theory Day 2011, University of Arizona, November

2012 1077<sup>th</sup> AMS Meeting in Boston, MA, Special Session on Linear Algebraic Groups: their Arithmetic, Geometry and Representations, January

Colloquium, University of Southern California, February

1079<sup>th</sup> AMS Meeting in Tampa, FL, Special Session on Representations of Algebraic Groups and Related Structures, March

Conference on the Representation Theory of Finite Groups, Oberwolfach Germany, March Workshop on Cohomology Bounds and Growth Rates, American Institute for Mathematics, Palo Alto, CA, Extemporary Talks, June

Conference on Cohomology and Supports in Representation Theory, University of Washington, Plenary Talk, July

Conference on Lie Algebras and Applications, Plenary Talk, Uppsala University, Sweden, September

1085<sup>th</sup> AMS Meeting in Tucson, AZ, Special Session on Representations of Groups and Algebras, October

Algebra Seminar, University of Georgia, November

2013 Algebra Seminar, University of Texas at Arlington, February

Colloquium, College of Charleston, March

Colloquium, University of Oregon, April

III International Symposium on Groups, Algebras and Related Topics, Peking University, Invited Talk, June

International Conference on Representation Theory VI, Zhangjiajie, China, Plenary Talk, June

Algebra Seminar (2), Morningside Institute, Beijing, China, July

Colloquium, Chinese Academy of Sciences, Beijing, China, July

Congress of the Americas, Special Session on Lie Representation Theory, Guanajuato, Mexico, August

Algebra Seminar, University of Georgia, August

2014 Algebra Seminar (2), University of Georgia, January, February

Joint Mathematics Meetings for the AMS and MAA, MAA Invited Paper Session, The Unreasonable Effectiveness of Modern Mathematics, Baltimore, MD, January

Algebra and Algebraic Geometry Pre-Seminar, University of Washington, February

Algebra and Algebraic Geometry Seminar, University of Washington, February

1097<sup>th</sup> AMS Meeting in Knoxville, TN, Special Session on Geometric and Combinatorial Methods in Lie Theory, March

Geometric Methods in Representation Theory Seminar, University of North Carolina, March Conference on Representations of Algebraic Groups, Invited Talk, University of Lyon, France, July

ICM 2014 Satellite Conference on Representation Theory and Related Topics, Invited Talk, Daegu, South Korea, August

Conference on Representations of Algebraic Groups and Related Objects, Plenary Talk, Friedrich-Schiller Universitat, Jena, Germany, September

Algebra Seminar, University of Georgia, September

Algebra, Geometry, Combinatorics Day (ALGECOM11), Plenary Talk, DePaul University, Chicago, IL, October

1105<sup>th</sup> AMS Meeting in Greensboro, NC, Special Session on Exceptional Groups in Physics, Algebra and Geometry, November

2015 USA-Mexico Conference in Representation Theory and Non-Commutative Algebra, Plenary Talk, Instituto de Matmaticas, UNAM, Mexico, January

Invited Seminar Speaker, Mittag-Leffler Institute, Stockholm, Sweden, February

Southwestern Group Theory Day, Invited Talk, University of Arizona, March

Conference on Cohomology of Finite Groups: Interactions and Applications, Oberwolfach, Germany, May

2016 Joint Mathematics Meetings, AMS Special Session on Geometric and Categorical Methods in Representation Theory, Seattle, WA, January

Conference on Vertex Algebras and Quantum Groups, Banff International Research Station, Banff, Canada, Invited Talk, February

Algebra Seminar, DePaul University, Chicago, IL, March

Workshop on Sheaves and Modular Representations of Reductive Groups, American Institute for Mathematics, San Jose, CA, Invited Talk, March

Oberseminar, University of Georgia, May

Southeastern Lie Theory Workshop IX, University of Virginia, Plenary Talk, May

Conference on Triangulated Categories and Applications, Banff International Research Station, Banff, Canada, Invited Talk, June

PIMS Workshop on Geometric and Topological Aspects of the Representation Theory of Finite Groups, Vancouver, Canada, Plenary Talk, August

Workshop on Endo-p-Permutation Modules in the Representation Theory of Finite Groups, Bernoulli Centre, EPFL, Lausanne, Switzerland, Plenary Talk, September

Algebra Seminar, University of Georgia, September

1124<sup>th</sup> AMS Meeting in Raleigh, NC, Special Session on Representation Theory of Lie Algebras, Quantum Groups and Related Stuctures, November

2017 Joint Mathematics Meetings, AMS Special Session on Group Representations and Cohomology, Atlanta, GA, January

Colloquium, Auburn University, February

Algebra Seminar, University of Georgia, February

Algebra and Algebraic Geometry Seminar, University of Washington, May

Congress of the Americas, Special Session on Cohomology of Groups, Montreal, Canada, July

Satellite Workshop on Representation Theory, Plenary Talk, University of Laval, Quebec City, Canada, July

1132<sup>nd</sup> AMS Meeting in Buffalo, NY, Special Session on Recent Advancements in Representation Theory, September

Colloquium, Georgia Southern University, October

2018 Group Representation Theory and Applications Seminar, MSRI, Berkeley, CA, February Algebra Seminar, University of Georgia, April

1139<sup>th</sup> AMS Meeting in Boston, MA, Special Session on Hopf Algebras, Tensor Categories, and Homological Algebra, April

Algebra and Representation Theory Seminar, University of Stuttgart, Germany, July

Conference on Algebraic Representation Theory, Plenary Talk, University of Stuttgart, Germany, July

ICM 2018 Satellite Conference on Algebras, Representations and Applications, Plenary Talk Cusco, Peru, August

Pure Math Seminar, University of South Alabama, October

Algebra Seminar, University of Georgia, November

Colloquium, University of Reno, Nevada, November

Algebra and Algebraic Geometry Seminar, University of Washington, December

2019 Taipei Conference on Representation Theory, Plenary Talk, Academia Sinica, Taipei, Taiwan January

Colloquium, College of Charleston, January

Colloquium, Louisiana St. University, February

 $1146^{\rm th}$  AMS Meeting in Auburn, AL, Special Session on Geometric Methods in Representation Theory, March

Lie Theory Seminar, Rutgers University, March

Topology Seminar, University of Rochester, April

1148<sup>th</sup> AMS Meeting in Hartford, CT, Special Session on Quantum Algebras and Related Topics, April

Vietnam-USA Joint Mathematical Meeting, Special Session on Groups, Representations and Applications, Quy Nhon, Vietnam, June

International Conference on Representation Theory VIII, Plenary Talk, Harbin, China, July Algebra Seminar, University of Georgia, November

Algebra and Discrete Mathematics Seminar, University of California, Davis, December

2020 Conference Lie and Jordan Algebras, their Representations and Applications, Plenary Talk, Chengdu, China, January

Mathematics Seminar, SUSTech Mathematical Institute, January

Conference on Cohomology of Finite Groups: Interactions and Applications, Oberwolfach, Germany, August

1162<sup>nd</sup> AMS Meeting in Salt Lake City, UT (virtual), Special Session on Geometry and Representation Theory of Quantum Algebras and Related Topics, October

Pure Math Day, Plenary Talk, Georgia Southern University, November

LieJor Online Seminar, Algebras, Representations and Applications, University of Sao Paulo, Brazil, December

2021 The RepNet Virtual Seminar, The International Centre for Mathematical Sciences, Edinburgh, Scotland, February

Quantum Groups Seminar, University of Copenhagen, Copenhagen, Denmark, February Algebra Seminar, University of Georgia, March

1165<sup>th</sup> AMS Meeting in Providence, RI (virtual), Special Session on Hopf Algebras, Tensor Categories and Related Homological Methods, March

Groups, Arithmetic, and Algebraic Geometry Seminar, EPFL, Lausanne, Switzerland, May Algebra Seminar, University of Georgia, September

1173<sup>th</sup> AMS Meeting in Mobile, AL (virtual), Special Session on Cohomology, Representation Theory, and Lie Theory, November

- 2022 1176<sup>th</sup> AMS Meeting in Boston, MA (virtual), Special Session on Linear Algebraic Groups: their Structure, Representations, and Geometry, March
  - Joint Mathematics Meetings (virtual), AMS Special Session on Hopf Algebras and Tensor Categories, Seattle, WA, April
  - STARS (Superalgebra Theory And Representations Seminar), Joint BGU-BIU-WIS (virtual) seminar based in Israel, April
  - Conference on Cohomology and Automorphism Groups, Invited Talk, University of Lyon, France, July
  - AMS-SMF-EMS Joint Mathematical Meeting, Special Session on Modular Representation Theory, Grenoble, France, July
  - Algebra Seminar, University of Georgia, October
  - 1182<sup>nd</sup> AMS Meeting in Salt Lake City, UT, Special Session on Geometry and Representation Theory of Quantum Algebras and Related Topics, October
- 2023 Algebra Seminar, University of Georgia, January, April
  - 1176<sup>th</sup> AMS Meeting in Atlanta, GA, Special Session on Representation Theory of Algebraic Groups and Quantum Groups: A Tribute to the Work of Cline, Parshall and Scott (CPS), March
  - Representation Theory and Related Topics Seminar, Northeastern University, April
  - Maurice Auslander International Conference, Plenary Expository Talk, Woods Hole Oceanographic Institute, MA, April
  - 1184<sup>th</sup> AMS Meeting in Fresno, CA, Special Session on Methods in Non-Semisimple Representation Categories, May
  - Geometrie, Algebre, Algebres d'operateurs (GAAO) Seminar, Université Clermont Auvergne, Clermont-Ferrand, France, May
  - International Algebra Conference in the Philippines (IACP), Plenary Talk, Lapu-Lapu City, Cebu, Philippines, August
  - Canada-Mexico-US Conference in Representation Theory, Noncommutative Algebra and Categorification, Invited Talk, Centre de Recherches Mathematiques (CRM), Montreal, Canada, August
  - Conference on Tensor Triangular Geometry and Interactions, Oberwolfach, Germany September
  - New Directions in Group Theory and Triangulated Categories Seminar (online), based at the University of Warwick, England, November

- 2024 Colloquium, SUSTech International Center for Mathematics, Shenzhen, China, March Workshop on Representation Theory, Invited Talk, Beijing Institute of Technology, March
  - Colloquium, Peking University, Beijing, China, March
  - Colloquium, Academia Sinica, Taipei, Taiwan, March
  - 1194<sup>th</sup> AMS Meeting in Washington DC, Special Session on Recent Developments in Noncommutative Algebra and Tensor Categories, April
  - Joint International Meeting for the AMS-UMI, Special Session on Representation Theory: Lie Theory and Geometry, Palermo, Italy, July
  - Conference on Representation Theory and K-theory, Plenary Talk, University of Southern California, August
  - Conference on Group Theory and Neighboring Disciplines, Plenary Talk, University of Denver, August

### Teaching Experience, Courses Taught

Berkeley: 1984–86 Calculus of One Variable (tutor/reader)

Yale: 1986–87 115a Calculus of One Variable (problem session)

1987–88 222b Linear Algebra (discussion section)

1988–89 115b Calculus of One Variable

1989–90 115a Calculus of One Variable

115b Calculus of One Variable

Auburn: 1990-91 161 Analytic Geometry and Calculus

266 (2) Introduction to Linear Algebra

264 Analytic Geometry and Calculus

265 Linear Differential Equations

331 Introduction to Abstract Algebra

Northwestern: 1991–92 B14–2 Calculus

C37 Introduction to Modern Algebra

B15 Multiple Integration and Vector Calculus

B17 Sequences and Series, Linear Algebra

C34 Linear Algebra and its Applications

1992–93 D84 Lie Algebras

E11–2 Seminar: Representation Theory of Algebraic Groups

and Lie Algebras

1993–94: C37 Introduction to Modern Algebra

1994–95: B14–2 Calculus

B14-1 Calculus

Utah State: 1995–96 531 Introduction to Group Theory

532 Introduction to Ring Theory

533 Galois Theory

731 Lie Algebras

732 Representations of Finite Groups

1996–97 220 Calculus

221 Calculus

631 Graduate Algebra

632 Graduate Algebra

633 Graduate Algebra

	1997–98	532 I 731 I	Intr Rep	oduction to Group Theory oduction to Ring Theory resentation Theory of Groups resentation Theory of Lie Algebras
	1998–99	6310 G 6320 G	Gra Gra	duate Algebra duate Algebra fors Calculus
	1999-00			culus
				lern Algebra
				lern Algebra
				resentation Theory
	2000-01		_	duate Algebra
				ear Algebra
				duate Algebra
		1100	Calo	culus
Georgia:	2001-02	2200 (2)		Calculus
0		2210		Calculus
		2700		Differential Equations
	2002-03	2200		Calculus
		8000		Graduate Algebra
		2200		Calculus
		4000/600	0	Modern Algebra and Geometry I
		4010/601	0	Modern Algebra and Geometry II
		8010		Graduate Algebra
		8850		Algebra VIGRE Research Group
	2004 – 05	3200		Introduction to Higher Mathematics
		8190		Representation Theory of Algebraic Groups
		8850		Algebra VIGRE Research Group
	2005 – 06	2210		Calculus
		2310H		Honors Calculus
		8850		Algebra VIGRE Research Group
	2006-07	2200(2)		Calculus
		2210		Calculus
		8030		Representation Theory
		8850		Algebra VIGRE Research Group
	2007 - 08	2200		Calculus
		2700		Differential Equations
		8030		Homological Algebra/Commutative Rings
		8850		Algebra VIGRE Research Group
	2008-09	2250(2)		Calculus (for Scientists and Engineers)
	2009–10	2200		Calculus
		8190		Representation Theory of Algebraic Groups
		8850		Algebra VIGRE Research Group

2010-11	4000/6000	Modern Algebra and Geometry I
2010-11	4010/6010	Modern Algebra and Geometry II
	8850	Algebra VIGRE Research Group
2011-12	8000/8005	Graduate Algebra
2011-12	2200	Calculus
2012-13	8190	
2012 14		Representation Theory of Algebraic Groups  Calculus (for Scientists and Engineers)
2013-14	2250	Calculus (for Scientists and Engineers)
0014.15	3000	Linear Algebra
2014-15	3000	Linear Algebra
0015 10	8190	Representation Theory of Algebraic Groups
2015-16	3000	Linear Algebra
	8000/8005	Graduate Algebra
2016-17	2260	Calculus (for Scientists and Engineers)
	3300	Applied Linear Algebra
	8850	Algebra Vertical Research Group
2017-18	3300	Applied Linear Algebra
	8080	Lie Algebras
2018-19	3300(2)	Applied Linear Algebra
2019-20	2260	Calculus (for Scientists and Engineers)
	8000/8005	Graduate Algebra
2020-21	3300	Applied Linear Algebra
	8190	Representation Theory of Algebraic Groups
2021-22	2260	Calculus (for Scientists and Engineers)
	3300	Applied Linear Algebra
	8030	Cohomology and Representation Theory
2022-23	2260	Calculus (for Scientists and Engineers)
	3300	Applied Linear Algebra
2023-24	3300	Applied Linear Algebra
	8190	Algebraic Groups
2024-25	8000/8005	Graduate Algebra
	8080	Lie Algebras
	3300	Applied Linear Algebra

- 1. Brauer-type reciprocity over a class of graded associative algebras (with R. Holmes), *J. Algebra* 144 (1991), 117–126.
- 2. Projective modules over Lie algebras of Cartan type, *Memoirs Amer. Math. Soc.* **98** no. 470 (1992).
- 3. Filtrations for periodic modules over restricted Lie algebras, *Indag. Math.* 3 no. 1 (1992), 59–68.
- 4. Block degeneracy and Cartan invariants for Lie algebras of Cartan type (with R. Holmes), *J. Algebra* **161** (1993), 155–170.
- 5. Homomorphisms inducing isomorphisms in Lie algebra cohomology, *J. Pure Appl. Algebra* 90 (1993), 49–54.
- 6. On the cohomology of the Witt algebra: W(1,1), Proc. III International Conference on Non-associative algebra and its applications (ed. S. Gonzales), Kluwer (1994).
- 7. A bound for the complexity of  $G_rT$ -modules, Proc. Amer. Math. Soc. 123 (2) (1995), 335–341.
- 8. On the vanishing of extensions of modules over reduced enveloping algebras (with J. Carlson and K. Peters), *Math. Annalen* 302 (1995), 541–560.
- 9. Algebraic group techniques in the representation and cohomology theory of Lie algebras of Cartan type (with Z. Lin), *J. Algebra* 179 (1996), 852–888.
- 10. Infinitesimal Schur algebras (with S. Doty and K. Peters), *Proc. London Math. Soc.* 72 (3) (1996), 588–612.
- 11. On the construction of indecomposable modules over restricted enveloping algebras (with R. D. Pollack), J. Pure Appl. Algebra 90 (1996), 61–73.
- 12. Complexity and support varieties for finite-dimensional algebras, Cont. Math. 194 (1996), 201–218.
- 13. Polynomial representations of Frobenius kernels of  $GL_2$ , (with S. Doty and K. Peters), Cont. Math. 194 (1996), 57–67.
- 14. Representations of Hopf algebras arising from Lie algebras of Cartan type (with Z. Lin), *J. Algebra* 189 (1997), 529–567.
- 15. Infinitesimal Schur algebras of finite representation type (with S. Doty and K. Peters), Quart. J. Math. Oxford (2) 48 (1997), 323–345.
- 16. Varieties for  $G_rT$ -modules, Proc. of Symposia in Pure Mathematics 63 (1998), 441–451.
- 17. Representation theory of the Witt algebra (with J. Feldvoss), J. Algebra 203 (1998), 447–469.

- 18. Good filtrations for Hopf algebras arising from Lie algebras of Cartan type (with Z. Lin), *J. Pure and Appl. Algebra* 127 (1998), 231–256.
- 19. Semisimplicity of Schur algebras, (with S. Doty), Math. Proc. Cambridge Phil. Soc. 124 no. 1 (1998), 15–20.
- 20. Support varieties for the Steenrod algebra (with J. Palmieri), Math. Zeit. 227 no. 4 (1998), 663–684.
- 21. Representation theory of Lie algebras of Cartan type, The Monster and Lie Algebras: Proceedings of a Special Research Quarter at The Ohio St. University, (ed. J. Ferrar, K. Harada), de Gruyter (1998), 235–252.
- 22. Complexes and vanishing of cohomology for group schemes (with C. Bendel), *J. Algebra* 214 (1999), 668–713.
- 23. Complexity for modules over finite Chevalley groups and classical Lie algebras (with Z. Lin), *Inventiones Math.* 138 (1999), 85–101.
- 24. Representation type for Schur algebras (with S. Doty, K. Erdmann, and S. Martin), *Math. Zeit.* 232 (1999), 137–182.
- 25. Extensions of modules over Hopf algebras arising from Lie algebras of Cartan type (with Z. Lin), Algebras and Representation Theory 3 (2000), 43–80.
- 26. Blocks of finite representation type in reduced enveloping algebras of classical Lie algebras (with R. D. Pollack), J. London Math. Soc. 61 (2000), 374–394.
- 27. Some recent developments in the representation theory of general linear and symmetric groups, *Representations and Quantizations*, Proceedings of the International Conference on Representation Theory (Shanghai, China), Springer-Verlag, 2000, 357–374.
- 28. Relating the cohomology of the general linear group and the symmetric group (with S. Doty), *Modular Representation Theory of Finite Groups*, Proceedings of a Symposium at the University of Virginia, Walter de Gruyter, 2001, 175–187.
- 29. On comparing the cohomology of algebraic groups, finite Chevalley groups and Frobenius kernels (with C. Bendel and C. Pillen), *J. Pure and Appl. Algebra* 163 (2001), 119–146.
- 30. Representation type for the blocks of Category  $\mathcal{O}$  (with V. Futorny and R. D. Pollack), Quart. J. Math. Oxford 52 (2001), 285–305.
- 31. On comparing the cohomology of general linear groups and symmetric groups (with A. S. Kleshchev), *Pacific J. Math.* 201 (2001), 339–355.
- 32. Representation type of quantum Schur algebras (with K. Erdmann), *Transactions of AMS* 353 (2001), 4729–4756.
- 33. Representation type of Hecke algebras (with K. Erdmann), Transactions of AMS 354 (2002), 275-285.

- 34. Support varieties for algebraic groups (with B. Parshall and D. Vella), *J. Reine Angew. Math.* 547 (2002), 15–49.
- 35. Extensions for finite Chevalley groups II (with C. Bendel and C. Pillen), *Transactions of AMS* 354 (2002), 4421–4454.
- 36. Support varieties of modules for symmetric groups (with D. Hemmer), J. Algebra 254 (2002), 422–440.
- 37. The restricted nullcone (with J. Carlson, Z. Lin and B. Parshall), Cont. Math. 325 (2003), 51–75.
- 38. The nucleus for restricted Lie algebras (with D. Benson), *Proc. Amer. Math. Soc.* 131 (2003), 3395–3405.
- 39. Extensions for Frobenius kernels (with C. Bendel and C. Pillen), *J. Algebra* 272 (2004), 476–511.
- 40. Extensions of modules over Schur algebras, symmetric groups, and Hecke algebras (with S. Doty and K. Erdmann), Algebras and Representation Theory 7 (2004), 67–100.
- 41. Extensions for finite Chevalley groups I (with C. Bendel and C. Pillen), *Advances in Math.* 183 (2004), 380–408.
- 42. Specht filtrations for Hecke algebras of type A (with D. Hemmer), J. London Math. Soc. 69 (2004), 623–638.
- 43. Varieties of nilpotent elements for simple Lie algebras I: Good Primes, (with the UGA VIGRE Algebra Group), J. Algebra 280 (2004), 719–737.
- 44. Nilpotent elements and support varieties for simple Lie algebras, *Resenhas* 6 no. 2/3 (2004), 281–290.
- 45. Extensions for finite groups of Lie type: Twisted Groups (with C. Bendel and C. Pillen), Finite Groups 2003 (held at the University of Florida), de Gruyter, New York, 2004, 29–46.
- 46. Representation type of the blocks of Category  $\mathcal{O}_S$  (with B. Boe), Advances in Math. 196 (2005), 193–256.
- 47. Varieties of nilpotent elements for simple Lie algebras II: Bad Primes, (with the UGA VIGRE Algebra Group), J. Algebra 292 (2005), 65–99.
- 48. On the realization of orbit closures as support varieties (with T. Tanisaki), *J. Pure and Applied Algebra* 206 (2006), 66–82.
- 49. Representation type for Schur superalgebras (with D. Hemmer and J. Kujawa), *J. of Group Theory* 9 (2006), 283–306.
- 50. Endotrivial groups for finite Chevalley groups (with J. Carlson and N. Mazza), *J. Reine Angew. Math.* 595 (2006), 93–120.

- 51. Extensions for finite groups of Lie type II: Filtering the truncated induction functor (with C. Bendel and C. Pillen), *Cont. Math.* 413 (2006), 1–23.
- 52. On the cohomology of Specht modules (with D. Hemmer), J. Algebra 306 (2006), 191–200.
- 53. Second cohomology for Frobenius kernels and related structures (with C. Bendel and C. Pillen), *Advances in Math.* 209 (2007), 162–197.
- 54. Support varieties for Weyl modules over bad primes (with the UGA VIGRE Algebra Group), J. Algebra 312 (2007), 602–633.
- 55. Projective modules for Chevalley groups and Frobenius kernels (with Z. Lin), Bulletin of the London Math. Soc. 39 (2007), 1019-1028.
- 56. Category  $\mathcal{O}$  for the Virasoro algebra: Cohomology and Koszulity (with B. Boe and E. Wiesner), *Pacific J. Math.* 234 (2008), 1-21.
- 57. Support varieties for modules over Chevalley groups and classical Lie algebras (with J. Carlson and Z. Lin), *Transactions of AMS* 360 (2008), 1879-1906.
- 58. Endotrivial modules for the symmetric group (with J. Carlson and N. Mazza), *Proceedings of the Edinburgh Math. Soc.* 51 (2008), 1-22.
- 59. Cohomology and support varieties for the Lie superalgebra W(n) (with I. Bagci and J. Kujawa), International Math. Research Notices, doi:10.1093/imrn/rnn115, (2008).
- 60. Cohomology and support varieties for Lie superalgebras II (with B. Boe and J. Kujawa), *Proceedings of the London Math. Soc.*, 98 (2009), 19-44.
- 61. On Kostant's theorem for Lie algebra cohomology (with the UGA VIGRE Algebra Group), Cont. Math., 478 (2009), 39-60.
- 62. Ext<sup>1</sup>-quivers for the Witt algebra W(1,1) (with B. Boe and E. Wiesner), J. Algebra, 322 (2009), 1548-1564.
- 63. An analog of Kostant's theorem for the cohomology of quantum groups (with the UGA VIGRE Algebra Group), *Proceedings of the AMS*, 138 (2010), 85-99.
- 64. On the cohomology of Young modules for the symmetric group (with F. Cohen and D. Hemmer), Advances in Math., 224 (2010), 1419-1461.
- 65. Cohomology and support varieties for Lie superalgebras (with B. Boe and J. Kujawa), *Transactions of the AMS*, **362** (2010), 6551-6590.
- 66. Complexity and module varieties for classical Lie superalgebras (with B. Boe and J. Kujawa), *International Math. Research Notices*, (2011), No. 3, 696-724.
- 67. Endotrivial modules for finite group schemes (with J. Carlson), J. Reine Angew. Math., 653 (2011), 149-178.

- 68. Detecting cohomology for Lie superalgebras (with G. Lehrer, R. Zhang), Advances in Math., 228 (2011), 2098-2115.
- 69. On the vanishing ranges for the cohomology of finite groups of Lie type (with C. Bendel and C. Pillen), *International Math. Research Notices*, doi:10.1093/imrn/rnr30, (2011).
- 70. On the support varieties for Demazure modules (with B. Jones), *J. Australian Math. Soc.*, 91 (2011), 343-363.
- 71. Endotrivial modules for finite group schemes II (with J. Carlson), Bulletin of the Institute of Mathematics Academia Sinica, 7 (2012), 271-289.
- 72. Differentiating Weyl's generic dimension formula with applications to support varieties, (with C. Drupieski and B. Parshall), *Advances in Math.*, 229 (2012), 2656-2668.
- 73. Second cohomology for finite groups of Lie type (with UGA VIGRE Algebra Group), *J. Algebra*, **360** (2012), 21-52.
- 74. Cohomology for infinitesimal unipotent algebraic and quantum groups (with C. Drupieski and N. Ngo), *Transformation Groups*, 17 (2012), 393-416.
- 75. Cohomology of algebraic groups, finite groups, and Lie algebras: Interactions and Connections, Lie Theory and Representation Theory, Survey of Modern Mathematics Volume II (edited by N. Hu, B. Shu, J.P. Wang), International Press, 2012, pp. 151-176.
- 76. On the vanishing ranges for the cohomology of finite groups of Lie type II (with C. Bendel and C. Pillen), *Proc. of the Symposia of Pure Mathematics*, 86 (2012), 25-73.
- 77. Complexity for modules over the classical Lie superalgebra  $\mathfrak{gl}(m|n)$  (with B. Boe and J. Kujawa), Compositio Math., 148 (2012), 1561-1592.
- 78. First cohomology of finite groups of Lie type: simple modules with small dominant weights (with the UGA VIGRE Algebra Group), *Transactions of the AMS*, **365** (2013), 1025-1050.
- 79. Cohomology for quantum groups via the geometry of the nullcone (with C. Bendel, B. Parshall and C. Pillen), *Memoirs of the AMS*, 229, no. 1077, (2014).
- 80. Extensions for finite Chevalley groups III: Rational and Generic Cohomology (with C. Bendel and C. Pillen), *Advances in Math.*, 262 (2014), 484-519.
- 81. On the structure of cohomology rings of *p*-nilpotent Lie algebras (with J. Carlson), *Transformation Groups*, **19** (2014), 721-734.
- 82. Bounding the dimension of rational cohomology groups (with C. Bendel, B. Boe, C. Drupieski, B. Parshall, C. Pillen, and C. Wright), *Current Developments and Retrospectives in Lie Theory: Algebraic Methods*, Developments in Mathematics (edited by G. Mason, I. Penkov, J.A. Wolf), Springer-Verlag, 2014, 51-69.
- 83. Endotrivial modules for the general linear group in a non-defining characteristic (with J. Carlson and N. Mazza), *Math. Zeitschrift*, 278 (2014), 901-925.

- 84. On good (p, r) filtrations for rational G-modules (with T. Kildetoft), J. Algebra, 423 (2015), 702-725.
- 85. Bounding extensions for finite Chevalley groups and Frobenius kernels (with C. Bendel, B. Parshall, C. Pillen, L. Scott, and D. Stewart), *Algebras and Representation Theory*, 18, (2015), 739-760.
- 86. Endotrivial modules for finite groups of Lie type A in the non-defining characteristic (with J. Carlson and N. Mazza), *Math. Zeitschrift*, 282 (2016), 1-24.
- 87. Bilinear and quadratic forms for rational modules of split reductive groups (with S. Garibaldi), Canadian J. Math., 68 (2016), 395-421.
- 88. The Lie module and its complexity (with F. Cohen and D. Hemmer), Bulletin of the London Math. Soc., 48 (2016), 109-114.
- 89. Third cohomology for Frobenius kernels and related structures (with C. Bendel, C. Pillen), *Proc. of the Symposia of Pure Mathematics*, 92 (2016), 81-118.
- 90. Globally irreducible Weyl modules (with S. Garibaldi and R. Guralnick), *J. Algebra*, 477 (2017), 69-87.
- 91. Tensor triangular geometry for Lie superalgebras (with B. Boe and J. Kujawa), *Advances in Math.*, 314 (2017), 228-277.
- 92. On the existence of mock injectives for algebraic groups (with W. Hardesty and P. Sobaje), Bulletin of the London Math. Soc., 49 (2017), 806-817.
- 93. Globally irreducible Weyl modules for quantum groups (with S. Garibaldi and R. Guralnick), Springer Proceedings in Mathematics and Statistics (Geometric and Topological Aspects of the Representation Theory of Finite Groups), Springer-Verlag International Publishing, 242 (2018), 313-336.
- 94. Support varieties for Hecke algebras (with Z. Xiang), *Homology, Homotopy and Applications*, 21(2) (2019), 1–24.
- 95. On tensoring with the Steinberg module (with C. Bendel, C. Pillen and P. Sobaje), *Transformation Groups*, 25(4) (2020), 981-1008.
- 96. Counterexamples to the Tilting and (p, r)-Filtration Conjectures (with C. Bendel, C. Pillen and P. Sobaje), J. Reine Angew. Math., 767 (2020), 193-202.
- 97. On BBW parabolics for simple classical Lie superalgebras (with D. Grantcharov, N. Grantcharov, and J. Wu), *Advances in Math.*, **381** (2021), 107647.
- 98. The nilpotent cone for classical Lie superalgebras (with L.A. Jenkins), *Proceedings of the AMS*, 149 (2021), 5065-5080.
- 99. On Donkin's Tilting Module Conjecture I: Lowering the Prime (with C. Bendel, C. Pillen and P. Sobaje), Representation Theory, 26 (2022), 455-497.

- 100. On torsion-free endotrivial modules for finite groups of Lie type (with J. Carlson, J. Grodal, and N. Mazza), *Pacific J. Math.* 317 (2022), 239–274.
- 101. On q-Schur algebras corresponding to Hecke algebras of type B (with C.J. Lai and Z. Xiang), Transformation Groups, 27 (2022), 983-1024.
- 102. On non-commutative tensor triangular geometry (with K. Vashaw and M. Yakimov), American J. Math. 144 (2022), 1681-1724.
- 103. Noncommutative tensor triangular geometry and the tensor product property for support maps (with K. Vashaw and M. Yakimov), *International Math. Research Notices*, 22, (2022), 17766-17796.
- 104. On sheaf cohomology for supergroups arising from classical simple Lie superalgebras (with D. Galban), *Transformation Groups* 28 (2023), 1101-1120.
- 105. On Donkin's Tilting Module Conjecture III: New Generic Lower Bounds (with C. Bendel, C. Pillen and P. Sobaje), *J. Algebra*, (2023), j.algebra.07.001.
- 106. On the spectrum and support theory for finite tensor categories (with K. Vashaw and M. Yakimov), *Math. Annalen*, (2023), https://doi.org/10.1007/s00208-023-02759-8
- 107. Realizing rings of regular functions through quantum group cohomology (with Z. Lin), to appear in the *Proc. of the Symposia of Pure Mathematics*.
- 108. On Donkin's Tilting Module Conjecture II: Counterexamples (with C. Bendel, C. Pillen and P. Sobaje), to appear in *Compositio Math.*.
- 109. Quantum Wreath Products and Schur-Weyl Duality I (with C.J. Lai and Z. Xiang), submitted.
- 110. A Chinese remainder theorem for monoidal triangulated categories (with K. Vashaw and M.Yakimov), submitted.
- 111. The homological spectrum and nilpotence theorems for Lie superalgebra representations (with M.Hamil), submitted.
- 112. Restricting rational G-modules in Type A (with C. Bendel, C. Pillen and P. Sobaje), submitted.
- 113. Tensor triangular geometry for quantum groups (with B. Boe and J. Kujawa), preprint.
- 114. Extensions for generalized loop algebras (with B. Boe, C. Drupieski, T. Macedo), preprint.