Jonathan Kujawa

Institutional Address

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Education

2003	Ph.D. Mathematics	University of Oregon
	Thesis Advisor: Jonatha	n Brundan
	Thesis: "The Representation Theory of the Supergroup $\mathrm{GL}(m n)$ "	
1999	M.S. Mathematics	University of Oregon
1997	B.A. Mathematics	Gustavus Adolphus College
1995 - 96		Budapest Semesters in Mathematics

Academic Positions

2017 – present	Professor of Mathematics	University of Oklahoma
2012 - 2017	Associate Professor of Mathematics	University of Oklahoma
Spring 2015	Visiting Research Fellow	Mittag-Leffler Institute
2007-2012	Assistant Professor of Mathematics	University of Oklahoma
Spring 2008	Postdoctoral Member	Mathematical Sciences Research Institute
2004 - 07	NSF Postdoctoral Fellow	University of Georgia
	Senior Sponsoring Scientist: Daniel Nakano	
2004-05	Franklin Teaching Fellow	University of Georgia
2003	Postdoctoral Fellow	University of Toronto
1997 - 03	Graduate Teaching Fellow	University of Oregon

Research Grants: Principal Investigator

2022 - 27	Simons Foundation Collaboration Grant	
2020 - 24	SQuaRE Research Group, American Institute of Mathematics	
	(with N. Davidson, R. Muth, and J. Zhu)	
2017 - 22	Simons Foundation Collaboration Grant	
2016 - 17	NSA Research Grant (H98230-16-0055)	
2012 - 16	NSF Research Grant (DMS-1160763)	
2014	NSF Conference Grant (DMS-1406933)	
2011 - 12	NSA Research Grant (H98230-11-1-0127)	
2007 - 11	NSF Research Grant (DMS-0734226)	

NSF Postdoctoral Fellowship (DMS-0402916)

Other Grants and Awards

2022	Nancy Scofield Hester Presidential Professorship, University of Oklahoma.
2017	Plenary Talk, AMS Sectional Meeting, U. Central Florida, Orlando, FL.
2012	Irene Rothbaum Outstanding Assistant Professor
2011, 2012	OU College of Arts and Sciences Junior Faculty Summer Fellowship
2008, 2012	OU Vice President for Research Travel Grants
2006	AMS/NSF Travel Grant to attend the 2006 ICM
2002	D. K. Harrison Research Award, University of Oregon

Research Interests

Representation theory and Lie theory. Particularly their connections to algebraic geometry, low-dimensional topology, and algebraic combinatorics.

Publications

- [1] A survey of support theories for Lie superalgebras and finite supergroup schemes, (with C. Drupieski), submitted, (2022).
- [2] Positivity and web bases for Specht modules of Hecke algebras, (with S. Heard), submitted, (2022).
- [3] Support varieties for Lie superalgebras in characteristic 2, (with C. Drupieski), submitted, (2022).
- [4] Webs of type P, (with N. Davidson and R. Muth), submitted, (2021).
- [5] Howe duality of type P, (with N. Davidson and R. Muth), submitted, (2021).
- [6] Quantum webs of type Q, (with G. Brown and N. Davidson), submitted, (2019).
- [7] Troesch complexes and cohomology for strict polynomial superfunctors, (with C. Drupieski), J. Pure Appl. Algebra, to appear, (2022).
- [8] M-traces in (non-unimodular) pivotal categories, (with N. Geer and B. Patureau-Mirand), Algebras Represent. Theory, to appear, (2021).
- [9] Complexity and support varieties for type P Lie superalgebras, (with B. Boe), Math. Res. Lett., to appear, (2020).
- [10] Webs of type Q. (with G. Brown), Algebraic Combin., Volume 4, no. 6 (2021), 1027-1072.
- [11] Support schemes for infinitesimal unipotent supergroups, (with C. Drupieski), Advances in Math., 384, (2021).
- [12] Support varieties and modules of finite projective dimension for modular Lie superalgebras, (with C. Drupieski, appendix by L. Avramov and S. Iyengar), Algebra & Number Theory, 15 no. 5 (2021).
- [13] Graded analogues of one-parameter subgroups and applications to the cohomology of $GL_{m|n(r)}$, (with C. Drupieski), Advances in Math., 348, (2019), 277-352.
- [14] On support varieties for Lie superalgebras and finite supergroup schemes, (with C. Drupieski), J. of Algebra, **525**, (2019), 64-110.
- [15] On the cohomological spectrum and support varieties for infinitesimal unipotent supergroup schemes, (with C. Drupieski), Adv. in Algebra, Springer Proc. Math. Stat., 277, (2019).
- [16] A basis theorem for the degenerate affine Brauer-Clifford supercategory, (with J. Brundan and J. Comes), Canad. J. Math., 71 (5), (2019), 1061-1101.
- [17] Geometric Schur duality of classical type, (with H. Bao, Y. Li, W. Wang), Transformation Groups, 23, (2018), 329–389.
- [18] Tensor triangular geometry for classical Lie superalgebras, (with B. Boe and D. Nakano), Advances in Math., **314**, (2017), 228–277.

Publications, continued

- [19] The marked Brauer category, (with B. Tharp), J. London Math. Soc. 95, (2017), No. 2, 393—413
- [20] Presenting Schur superalgebras, (with H. El Turkey), Pacific J. Math., 262, (2013), No. 2, 285—316.
- [21] Ambidextrous objects and trace functions for nonsemisimple categories, (with N. Geer and B. Patureau-Mirand), Proc. Amer. Math. Soc., 141, (2013), no. 9.
- [22] The generalized Kac-Wakimoto conjecture and support varieties for the Lie superalgebra $\mathfrak{osp}(m|2n)$, SE Lie Theory Conf. Proc., Proc. Symp. Pure Math., 86, (2012).
- [23] Modified Traces on Deligne's Category Rep (S_t) , (with J. Comes), J. Algebraic Combin., 36 (2012), no. 4, 541–560.
- [24] Complexity for modules over the classical Lie superalgebra $\mathfrak{gl}(m|n)$, (with B. Boe and D. Nakano), Compositio Math., 148, Issue 5, (2012), 1561–1592.
- [25] Degenerate affine Hecke-Clifford algebras and type Q Lie superalgebras, (with D. Hill and J. Sussan), Math. Zeit., Volume 268, Numbers 3-4 (2011), 1091–1158.
- [26] Generalized trace and modified dimension functions on ribbon categories, (with N. Geer and B. Patureau-Mirand), Selecta Math., Volume 17, Issue 2 (2011), 453–504.
- [27] Complexity and module varieties for classical Lie superalgebras, (with B. Boe and D. Nakano), Int. Math. Res. Notices, no. 3 (2011), 696–724.
- [28] Cohomology and support varieties for Lie superalgebras, (with B. Boe and D. Nakano), Trans. Amer. Math. Soc., 362 (2010), 6551–6590.
- [29] Cohomology and support varieties for Lie superalgebras II, (with B. Boe and D. Nakano), Proc. London Math. Soc., 98 (2009), no. 1, 19–44.
- [30] On Kostant's theorem for Lie algebra cohomology, (with UGA VIGRE Algebra Group), Contemp. Math., 478 (2009) 39-60.
- [31] Cohomology and support varieties for the Lie superalgebra W(n), (with I. Bağcı and D. Nakano), Int. Math. Res. Notices, Article ID: rnn115, (2008).
- [32] Support varieties for Weyl modules over bad primes, (with UGA VIGRE Algebra Group), J. Algebra, **312** no 2. (2007), 602–633.
- [33] The Steinberg tensor product theorem for GL(m|n), Contemp. Math., 413 (2006), 123–132.
- [34] Representation type of Schur superalgebras, (with D. Hemmer and D. Nakano), J. Group Theory, 9 no 3. (2006), 283–306.
- [35] Crystal structures arising from representations of GL(m|n), Rep. Theory, 10 (2006), 49–85.
- [36] Varieties of nilpotent elements for simple Lie algebras II: bad primes, (with UGA VIGRE Algebra Group), J. Algebra, **292** no 1. (2005), 65–99.
- [37] A new proof of the Mullineux conjecture, (with J. Brundan), J. Algebraic Combin., 18, no 1. (2003), 13–39.

Conferences and Invited Talks

April

Symmetric Spaces, Their Generalizations, and Special Functions, Univ. of Ottawa, Canada. 2022 August July New directions in group theory and triangulated categories, online. June Homological Comm. Algebra and Related Topics, Georgia Southern Univ., Savannah, GA. March AMS Southeastern Section Meeting Special Session. (canceled due to covid-19) 2021 November AMS Southeastern Section Meeting Special Session, online. AMS Western Section Meeting Special Session, online. May April Superalgebra Theory and Representations Seminar (STARS), BGU-BIU-WIS, Israel. 2020 October New Trends in Rep. Theory (three talks), Hausdorff Institute of Math., Bonn, Germany. AMS Western Section Meeting Special Session, online. October August Cohomology of Finite Groups: Interactions and Apps., MFO, Oberwolfach, Germany. March AMS SE Section Meeting Special Session, Univ. of Virginia, Charlottesville, VA. (canceled due to covid-19) January Colloquium, Reed College. Algebraic and Geometric Categorification, BIRS-CMO, Oaxaca, Mexico. 2019 December September AMS Central Section Meeting Special Session, UW-Madison, Madison, WI. Reps. of monoidal categories and 2-categories, Univ. of East Anglia, Norwich, UK. July June Vietnam-USA Joint Math. Meeting Special Session, Quy Nhon, Vietnam March AMS SE Section Meeting Special Session, Auburn Univ., Auburn, AL. 2018 September Interactions of low-dim. topology and "higher" representation theory, Universität Zürich. Southwest Local Algebra Meeting, University of Arkansas. February Colloquium and Seminar, University of Oregon. January 2017 December Rep. Theory of Symmetric Groups and Related Algebras, IMS NUS, Singapore. October Plenary talk, AMS SE Section Meeting, Univ. of Central Florida, Orlando, FL. July Mathematical Congress of the Americas Special Session, Montréal, Canada. July Workshop on Rep. Theory of Lie Superalg. and related topics, NCTS, Taipei, Taiwan. March AMS SE Section Meeting Special Session, College of Charleston, Charleston, SC. January AMS National Meeting Special Session, Atlanta, GA. 2016 AMS National Meeting Special Session, Seattle, WA. January 2015 October Colloquium, DePaul University. Algebra and Combinatorics Seminar, Loyola University. October May Representation Theory Workshop, Uppsala, Sweden. Interaction of Rep. Theory with Geometry and Combinatorics, Bonn, Germany. March Rep. Theory, Categorification, and Noncomm. Algebra, UNAM, Mexico City. January Commutative Algebra Seminar, University of Utah. 2014 October October Colloquium, Utah State University. October Lie Theory Seminar, University of Colorado. September Algebraic Lie Theory, ICMS, Edinburgh, Scotland. September AMS Central Section Meeting Special Session, UW-Eau Claire, Eau Claire, WI. May Southeast Lie Theory Conference, University of Georgia. April Great Plains Combinatorics Conference, University of Kansas. March AMS SE Section Meeting Special Session, Univ. of Tennessee, Knoxville, TN. 2013 October AMS Eastern Section Meeting Special Session, Temple Univ., Philedelphia, PA. May Workshop on Super Rep. Theory, Academia Sinica, Taipei, Taiwan.

AMS Central Section Meeting Special Session, Univ. of Colorado, Boulder, CO.

Conferences and Invited Talks, continued

2012 October AMS SE Section Meeting Special Session, Tulane University, New Orleans, LA. September New York Algebra Colloquium, CUNY, NYC, NY. September AMS Eastern Section Meeting Special Session, RIT, Rochester, NY. Lie Theory Seminar, University of CA, Riverside May March AMS Central Section Meeting Special Session, Univ. of Kansas, Lawrence, KS. March AMS SE Section Meeting Special Session (two talks), USF, Tampa, FL. 2011 October Colloquium, Utah State University. October AMS Western Section Meeting Special Session, Univ. of Utah, Salt Lake City, UT. September Algebraic Representation Theory Conference, Uppsala University, Sweden. March Representation Theory Seminar, Virginia Tech. 2010 May Southeast Lie Theory Conference, University of Georgia. April AMS Central Section Meeting Special Session, Macalester College, St. Paul, MN. March Combinatorial Rep. Theory Workshop, MFO, Oberwolfach, Germany. January AMS National Meeting Special Session, San Francisco, CA. 2009 November Algebra and Combinatorics Seminar, Texas A & M University. October AMS Central Section Meeting Special Session, Baylor University, Waco, TX. July LMS Symposium on Comb. Geo. Structures in Rep. Theory, Durham, UK. 2008 October AMS Central Section Meeting Special Session, Kalamazoo, MI. October AMS Western Section Meeting Special Session, Vancouver, Canada. September Rep. Theory, Geometry, and Combinatorics Seminar, Univ. of Cal., Berkeley, CA. July Summer School on Quantum Grps and Lie Theory, ECNU, Shanghai, China. Conference on Homological Methods in Rep. Theory, MSRI, Berkeley, CA. April March AMS SE Section Meeting Special Session, Baton Rouge, LA. February Millican Colloquium, University of North Texas. AMS SE Section Meeting Special Session, Murfreesboro, TN. 2007 November September Group Embeddings: Geometry and Representations, BIRS, Banff, Canada. May Algebraic Lie Theory, BIRS, Banff, Canada. March AMS SE Section Meeting Special Session, Davidson, NC. AMS National Meeting Special Session, New Orleans, LA. January 2006 November Algebra Seminar, University of Toledo. Conference on Ass. and Non-ass. Alg. Structures, Oviedo, Spain. August February Algebra Seminar, University of Virginia. 2005 October Colloquium, University of Southern Alabama. October Algebra Seminar, University of Southern Alabama. September Algebra Seminar, University of Virginia. June Conference on Alg. and Finite Reductive Groups, EPFL, Lausanne, Switzerland. March Colloquium, Kansas State University. January AMS National Meeting Special Session, Atlanta, GA. 2004 October Colloquium, University of Toledo. July AMS Summer Research Conference: Rep. of Algebraic Groups, Quantum Groups, and Lie Algebras, Snowbird, UT. Contributed Talk, AMS National Meeting, Baltimore, MD. 2003 January 2002 July International Conf. on Rep. of Algebras, X, Fields Institute, Toronto, ON. June AMS Summer Research Conference: Groups, Representations and

Cohomology, Mount Holyoke College, MA.

Other Presentations

$2022 \\ 2021$	March November	Algebra Seminar, University of Oklahoma. Algebra Seminar, University of Oklahoma.
	April	Algebra Seminar, University of Oklahoma.
2019	November	GIT Seminar, University of Oklahoma.
	March	Algebra Seminar, University of Oklahoma.
	April	Graduate Student Seminar, University of Oklahoma.
2018	August	Algebra Seminar, University of Oklahoma.
2017	September April	Algebra Seminar, University of Oklahoma. Graduate Student Seminar, University of Oklahoma.
2015	November	Graduate Student Seminar, University of Oklahoma.
2014	September	Algebra Seminar, University of Oklahoma.
	April	Algebra Seminar, University of Georgia.
	March	Algebra Seminar, University of Oklahoma.
2012	November	Algebra Seminar, University of Oklahoma.
	January	Algebra Seminar, University of Oklahoma.
2011	August	Algebra Seminar, University of Oklahoma.
	April	Undergraduate Colloquium, Lewis and Clark College, Portland, OR.
2010	August	Algebra Seminar, University of Oklahoma.
	May April	VIGRE Summer School on Lie and Representation Theory, University of Georgia. Undergraduate Colloquium, Gustavus Adolphus College, St. Peter, MN.
	April	Mathematics Department Awards Dinner, University of Oklahoma.
	February	Algebra Seminar, University of Oklahoma (two talks).
2009	January	Graduate Student Recruitment Day, University of Oklahoma
	February	Algebra Seminar, University of Oklahoma (three talks).
2008	October	Graduate Student Seminar, University of Oklahoma.
	May	Seminar on representations of symmetric groups and closely related objects, MSRI.
	February	Postdoctoral Seminar, MSRI.
2007	October	Graduate Student Seminar, University of Oklahoma.
	September	Algebra Seminar, University of Oklahoma.
	Spring	VIGRE Graduate Seminar, University of Georgia.
2006	November	Algebra Seminar, University of Georgia.
	September February	VIGRE Algebra Seminar, University of Georgia. Algebra Seminar, University of Georgia.
2005	December	VIGRE Graduate Seminar, University of Georgia.
2005	October	Algebra Seminar, University of Georgia.
	April	VIGRE Graduate Seminar, University of Georgia.
2004	October	VIGRE Algebra Seminar (three talks), University of Georgia.
_001	September	Algebra Seminar, University of Georgia.
	March	Algebra Seminar, University of Georgia.
	February	Lie Theory Seminar (three talks), University of Georgia.

Teaching Experience

Intro. to Representation Theory I Fall 2020, Fall 2012

Lie Theory I Fall 2010

Lie Theory II Spring 2016, Fall 2011

Graduate Abstract Algebra I Fall 2022, Fall 2016, Fall 2009

Graduate Abstract Algebra II Spring 2023, Spring 2017, Spring 2012, Spring 2010

Abstract Linear Algebra Fall 2022, Fall 2013, Fall 2010

Discrete Mathematics Spring 2021, Fall 2019, Spring 2018, Fall 2013

Undergraduate Abstract Algebra I/II Fall 2018/Spring 2019, Fall 2011/Spring 2012, Fall 2008/Spring 2009

Honors Calculus IV Spring 2010 Honors Calculus III Fall 2009

Honors Calculus II Spring 2020, Fall 2012, Spring 2009

Honors Calculus I Fall 2008 New Graduate Student Summer Seminar Summer 2002

Linear Algebra Spring 2012, Spring 2005, Spring 2003

Introduction to Probability and Statistics Summer 2001

Calculus III Fall 2007, Winter 2003, Spring 2002 Calculus II Fall 2017, Winter 2002, Spring 2001

Calculus I Spring 2013, 2011, 2005, 2004, 2000; Fall 2021, 2015, 2001

Business Calculus II Summer 1998 Business Calculus I Fall 2003

Discrete Math III Fall 2002, Summer 2000

Introduction to Mathematical Modeling Fall 2004

Elementary Functions Winter 2000, Summer 1998

College Algebra Fall 2000, 1999, 1997; Winter 1999, 1998; Spring 1999, 1998

Teaching Education

January 2004 – June 2005 Franklin Teaching Fellow Program, University of Georgia.

A selective university-wide program to foster excellence in university teaching.

Winter 2000 Seminar on College Science Teaching, University of Oregon.

An interdisciplinary seminar on teaching methods in university science courses.

Fall 1997 Seminar on Teaching Mathematics, University of Oregon.

A weekly seminar on teaching mathematics in a university setting.

Advising and Mentoring (Undergraduate)

Fall 2019 - Spring 2022 LSAMP and McNair Scholars Mentor,

Samuel Heard, University of Oklahoma.

Summer 2020 - Spring 2021 McNair Scholars Mentor,

Skyler Moomey, University of Oklahoma.

Summer 2016 Reading Course on Algebraic Geometry.

Haley Smith, Phillip Bretz, University of Oklahoma.

Undergraduate Honors Thesis Advisor, Fall 2010 – present

> Sam Heard, University of Oklahoma (2020-2022). Colton Sandvik, University of Oklahoma (2020-2021).

Timothy Rhyker Benavidez, University of Oklahoma (2011-2014).

Teresa Whitelaw, University of Oklahoma (2012-2014). William Goldenberg, University of Oklahoma (2012-2013). Lauren Lajos, University of Oklahoma (2011-2013). Patrick Orchard, University of Oklahoma (2010-2011).

Spring 2009 – present Vertical (Undergraduate + Graduate) Research Group, Univ. of Oklahoma.

Fall 2012 - Spring 2014 McNair Scholars Mentor,

Timothy Rhyker Benavidez, University of Oklahoma.

Advising and Mentoring (Graduate)

2019 – present Ph.D. advisor,

Erin Hausmann, University of Oklahoma.

SMART Fellowship Recipient.

2018 – present Ph.D. advisor,

Ryan Reynolds, University of Oklahoma.

2018 - 2022Ph.D. advisor,

Joseph Randich, University of Oklahoma.

SMART Fellowship Recipient.

Now at the Naval Information Warfare Center (NIWC) Pacific.

2014 - 2018Ph.D. advisor,

Jieru Zhu, University of Oklahoma.

Bullard Dissertation Completion Award Recipient.

Now a postdoctoral fellow at Okinawa Institute of Science and Technology, Okinawa, Japan.

2014 - 2017Ph.D. advisor,

Gordon Brown, University of Oklahoma.

Now at Lockheed-Martin.

2013 - 2017Ph.D. advisor,

Benjiman Tharp, University of Oklahoma.

Bullard Dissertation Completion Award Recipient.

Now at Ingersoll-Rand.

2010 - 2014Ph.D. advisor,

> Houssein El Turkey, University of Oklahoma. Now tenured at University of New Haven.

Advising and Mentoring (Graduate), continued

2008 – present Ph.D. committee member,

> James Beyer, University of Oklahoma (2021-present). Steven Lin, University of Oklahoma (2020-present).

Jugal Talukdar, University of Oklahoma (Physics, 2020-present).

Jordan Danser, University of Oklahoma (2019-present). Dustin Gaskins, University of Oklahoma (2019-present).

Matthew Holtfrerich, University of Oklahoma (Physics, 2016-present).

Jessica Lajos, University of Oklahoma (2018-2021). Thomas Morgan, University of Oklahoma (2016-2019). Elizabeth Pacheco, University of Oklahoma (2013-2019). Colin Vernooy, University of Oklahoma (2014-2019).

Kevin Haghi, University of Oklahoma (Meteorology, 2013-2017).

William Carter, University of Oklahoma (2012-2015). Salam Turki, University of Oklahoma (2012-2015). Thomas Madsen, University of Oklahoma (2008-2014). Catherine Hall, University of Oklahoma (2008-2012).

Kumar Balasubramanian, University of Oklahoma (2008-2012).

2005 - 2009Secondary Ph.D. thesis advisor,

Irfan Bağcı, University of Georgia.

Now tenured at University of North Georgia.

2005 - 2007Ph.D. committee member,

Kenyon Platt, University of Georgia.

Advising and Mentoring (Postdoctoral)

2023 – present Postdoctoral Mentor,

Lauren Grimley, University of Oklahoma.

2016 - 2019Postdoctoral Mentor,

Nick Davidson, University of Oklahoma.

Tenure track at College of Charleston, Charleston, SC.

2010 - 2012Postdoctoral Mentor,

> Lei Zhao, University of Oklahoma. Now at TF Securities, Beijing, China.

2008 - 2011Postdoctoral Mentor,

> Stephen Spallone, University of Oklahoma. Tenured at IISER Pune, Pune, India.

Outreach

Spring 2014 – present Author of a bi-monthly column on mathematics for 3 Quarks Daily.

Fall 2007 – present High School Math Day Co-organizer, Univ. of Oklahoma.

2010 - 2015Faculty Panelist for Career Recruiter Day, Univ. of Oklahoma.

Fall 2008 - Spring 2013 Principal author of the OU Math Club blog. Fall 2008 - Spring 2012 Advisor to the undergraduate OU Math Club

Winter 2004, Winter 2005 Mathematician, Barrow Elementary Career Day, Athens, GA.

Service Within the Mathematical Community

Summer 2024 Co-organizer, Conference on Lie and Representation Theory, University of Georgia. Spring 2024 Co-organizer, SLAM Algebra Conference, University of Oklahoma. Spring 2021 – present Editorial board member, J. of Algebra. Fall 2003 – present Referee for Publ. of IHES, Compositio Math., Duke Math J., Proc. LMS, Proc. AMS, Comm. Math. Physics, Trans. Groups, Ann. Inst. Fourier, J. of Algebra, J. of Alg. Comb., Comm. in Algebra, J. Pure Appl. Algebra, J. of Comb. Theory-A, Acta Math. Sinica, Proc. Symp. of Pure Math. Glasgow Math. J., Quaestiones Math., Canadian J. of Math., Alg. Comb., etc. Fall 2003 – present Reviewer for Mathematical Reviews. Fall 2018 - present MSRI Academic Sponsors Day Committee member; Chair for 2020 Sponsors Day. Spring 2019 External PhD thesis examiner, Jyotirmoy Ganguly, IISER Pune, Pune, India. Spring 2019 Co-organizer, AMS Special Session, Honolulu, Hawaii. Invited grant reviewer for the U.S.-Israel Binational Science Foundation. Fall 2018 Co-organizer, AMS Special Session, San Francisco, California. Fall 2014 - Fall 2018 MSRI Academic Sponsors Executive Committee member. Fall 2017 Co-organizer, AMS Special Session, Orlando, Florida. Invited grant panelist for the National Science Foundation (NSF) (twice). Invited grant reviewer for NSF – Binational Science Foundation (twice). Invited grant reviewer for the National Security Agency. Spring 2011 - 2015Fall 2014 Co-organizer of Algebraic Lie Theory Conference, ICMS, Edinburgh, Scotland. Fall 2011 Co-organizer, AMS Special Session, Lincoln, Nebraska.

Service Within the University

Fall 2019 – present	Retirement Plans Management Committee Member, Univ. of Oklahoma.
Fall 2019 – Spring 2020	Search Committee Member, Univ. of Oklahoma,
	Math Faculty Position.
Spring 2016 – Fall 2021	Associate Chair, Dept. of Mathematics, Univ. of Oklahoma.
$Fall\ 2019-Spring\ 2020$	Search Committee Member, Univ. of Oklahoma,
	AMO/CM Faculty Position, Physics Department.
Fall 2015 – Fall 2016	Search Committee Chair, Univ. of Oklahoma,
	First Year Mathematics Director Position.
Fall 2012 – Fall 2013	Math Dept. Executive Committee (Committee A), Univ. of Oklahoma.
$Fall\ 2011-Spring\ 2012$	Search Committee Chair, Univ. of Oklahoma,
	Math Education Faculty Position.
Fall 2010 – Spring 2011	Search Committee Member, Univ. of Oklahoma,
	Math Education Faculty Position.
Fall 2009 – Spring 2010	Search Committee Member, Univ. of Oklahoma,
	Postdoctoral Faculty Position.
Fall 2004 – Spring 2007	Algebra Seminar Coordinator, Univ. of Georgia.
Winter $2003 - Spring 2007$	VIGRE Algebra Group Member, Univ. of Georgia.
Winter 2003 – Spring 2005	Lie Theory Seminar Coordinator, Univ. of Georgia.