Ryan Kinser
Mathematics

Curriculum Vitae as of August 28, 2024

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EDUCATION AND PROFESSIONAL HISTORY

Higher Education

2009	**PhD**, Mathematics, University of Michigan
2003	**BS**, Mathematics, University of Kansas
	Minors: Physics and Philosophy

Professional and Academic Positions

Jan 2023 - Present	**Chair (DEO),** Department of Mathematics, The University of Iowa
2024 - Present	**Professor**, The University of Iowa
2019 - 2024	**Associate Professor**, The University of Iowa
2013 - 2019	**Assistant Professor**, The University of Iowa *(on research leave 2013-2014)*
2011 - 2014	**Research Instructor**, Northeastern University
2009 - 2011	**Postdoctoral Fellow**, Mathematics, University of Connecticut

Honors and Awards

2024	**Collegiate Scholar**, awarded by CLAS Committee on Faculty Promotion and Tenure
Fall 2021	**Professional Development Award** (sabbatical), University of Iowa
2017	**Faculty Fellow,** Learning Design Collaboratory, University of Iowa
2014, 2017	**US Junior Oberwolfach Fellow**, Mathematisches Forschungsinstitut Oberwolfach and National Science Foundation

Memberships

2023 - Present	*American Indian Science and Engineering Society*
2020 - Present	*Society for Advancement of Chicanos/Hispanics and Native Americans in Science*
2019 - Present	*National Association of Mathematicians* (lifetime member)
	Professional organization promoting excellence in the mathematical sciences, and mathematical development of all underrepresented American minorities in general and African-Americans in particular.

TEACHING

Courses Taught at the University of Iowa (Reading Research and Research Seminars omitted after 2020)

Term	Course#	Title	Ten-Day Enrollment	Final Enrollment
Fall 2024	MATH:7900:0009	Practicum in College Teaching	1	1
Fall 2024	MATH:5900:0001	First-Year Graduate Seminar	18	18
Fall 2023	MATH:5900:0001	First-Year Graduate Seminar	18	18
Spring 2023	MATH:5010:0AAA	Abstract Algebra II	18	18

Term	Course#	Title	Ten-Day Enrollment	Final Enrollment
Fall 2022	MATH:7900:0009	Practicum in College Teaching	1	1
Fall 2022	MATH:5900:0001	First-Year Graduate Seminar	20	20
Fall 2022	MATH:5000:0AAA	Abstract Algebra I	19	19
Spring 2022	MATH:6010:0001	Introduction to Algebra II	10	10
Spring 2021	MATH:6010:0001	Introduction to Algebra II	9	8
Fall 2020	MATH:6000:0001	Introduction to Algebra I	9	10
Fall 2020	GRAD:7400:0013	Practicum in College Teaching	1	1
Fall 2020	MATH:7990:1002	Reading Research	1	1
Summer 2020	MATH:7990:9123	Reading Research	4	4
Spring 2020	MATH:7070:0001	Seminar: Algebra	1	1
Fall 2019	MATH:4020:0BBB	Basic Abstract Algebra	1	1
Fall 2019	MATH:3720:0BBB	Introduction to Abstract Algebra I	36	36
Fall 2019	MATH:7030:0001	Topics in Algebra	19	19
Summer 2019	MATH:7990:5580	Reading Research	2	2
Spring 2019	MATH:5010:0A01	Abstract Algebra II	5	5
Spring 2019	MATH:5010:0AAA	Abstract Algebra II	5	5
Spring 2019	MATH:1550:0AAA	Engineer Math I Single Variable Calculus	70	70
Spring 2019	GRAD:7400:0004	Practicum in College Teaching	1	1
Spring 2019	MATH:7070:0001	Seminar: Algebra	1	1
Fall 2018	MATH:5000:0AAA	Abstract Algebra I	10	
Fall 2018	MATH:7070:0001	Seminar: Algebra	1	
Summer 2018	MATH:7990:1380	Reading Research	2	
Spring 2018	MATH:1550:0AAA	Engineer Math I Single Variable Calculus	81	
Spring 2018	MATH:6010:0001	Introduction to Algebra II	14	
Spring 2018	MATH:7070:0001	Seminar: Algebra	2	
Spring 2018	MATH:7080:0001	Seminar: Commutative Ring Theory	2	

Term	Course#	Title	Ten-Day Enrollment	Final Enrollment
Fall 2017	MATH:6000:0001	Introduction to Algebra I	11	
Fall 2017	GRAD:7400:0005	Practicum in College Teaching	1	
Fall 2017	MATH:7990:7129	Reading Research	1	
Summer 2017	MATH:7990:7128	Reading Research	2	
Spring 2017	MATH:7990:3937	Reading Research	2	
Spring 2017	MATH:3997:5424	Readings in Mathematics	1	
Spring 2017	MATH:7080:0001	Seminar: Commutative Ring Theory	2	
Fall 2016	MATH:4020:0BBB	Basic Abstract Algebra	2	
Fall 2016	MATH:3720:0BBB	Introduction to Abstract Algebra I	38	
Fall 2016	GRAD:7400:2	Practicum in College Teaching	1	
Fall 2016	GRAD:7400:7	Practicum in College Teaching	1	
Fall 2016	MATH:7990:1588	Reading Research	1	
Fall 2016	MATH:7070:1	Seminar: Algebra	1	
Fall 2016	MATH:7030:1	Topics in Algebra	14	
Summer 2016	MATH:7990:2573	Reading Research	1	
Spring 2016	MATH:2550:0091	Engineering Math III: Matrix Algebra	66	
Spring 2016	MATH:6010:0001	Introduction to Algebra II	11	
Spring 2016	MATH:7990:0012	Reading Research	1	
Spring 2016	MATH:7070:0001	Seminar: Algebra	1	
Fall 2015	MATH:3550:0121	Engineering Math V: Vector Calculus	33	
Fall 2015	MATH:6000:0001	Introduction to Algebra I	11	
Spring 2015	MATH:2550:0091	Engineering Math III: Matrix Algebra	80	
Spring 2015	MATH:2550:0101	Engineering Math III: Matrix Algebra	79	
Spring 2015	MATH:7070:0001	Seminar: Algebra	2	
Fall 2014	MATH:7070:0001	Seminar: Algebra	1	
Fall 2014	MATH:7030:0001	Topics in Algebra	13	

Innovations in Teaching
Revisions in Existing Courses
- Summer 2021, **Course redesign MATH:5900 First-year Graduate Seminar,** design and implementation of two course modules: *Individual Development Plans and Career Overviews for doctoral students in mathematical sciences* and *How to Match with a Research Advisor for doctoral students in mathematical sciences*
- May 2017 - May 2019, **Course redesign MATH:1550 Engineering Math I**, Student centered course redesign in conjunction with the Learning Design Collaboratory and Office of Teaching, Learning & Technology

Workshop/Clinic
- May 2017 - Aug 2017, **Learning Design Collaboratory Community of Practice**, Office of Teaching, Learning & Technology

Student Mentoring

BS - Supervised Research and Career Mentoring

Jan 2021 - Spring 2022	Davis, Nyah. *2021 Goldwater Scholar, NSF-RTG Undergraduate Scholarship, Ford Foundation Pre-doctoral Fellowship (declined), NSF Graduate Research Fellow.*

PhD - Research Advisor

Fall 2023 - Present	Ahmed, Bakhtiar
Fall 2023 - Present	Mattson, Blake
Fall 2022 - Present	Singh, Shashank
Fall 2022 - Present	Del Real Ramos, Kevin
Summer 2022 - Present	Van Grinsven, Jacob
Fall 2021 - Present	Askelsen, Elise
Fall 2021 – Summer 2024	Sauder, Joseph (co-advised with Bruce Ayati)
Summer 2019 - Summer 2023	Diaz, Yariana; *PhD Completed.* First position: Macalester University
Spring 2019 - Summer 2023	Gilbert, Cody; *PhD Completed.* First position: Saint Louis University
Fall 2019 - Spring 2022	Oswald, Amrei; *PhD Completed.* First position: University of Washington
Summer 2016 - Spring 2019	Lara, Danny; *PhD Completed.* First position: Central Washington University
Fall 2015 - Summer 2018	Berrizbeitia, Ana; *PhD Completed.* First position: Colorado Mesa University

PhD - Comprehensive Exam, Chair

Spring 2024	Singh, Shashank
Fall 2023	Van Grinsven, Jacob
Summer 2023	Del Real Ramos, Kevin
Fall 2022	Askelsen, Elise
Spring 2022	Sauder, Joseph (Co-chair)
Spring 2021	Diaz, Yariana
Fall 2020	Gilbert, Cody
Fall 2019	Oswald, Amrei
Fall 2017	Lara, Danny
Fall 2016	Berrizbeitia, Ana

PhD - Comprehensive Exam, Member

Summer 2024	Starr, Joseph
Spring 2024	Capovilla-Searle, Michele
Spring 2024	Barber, Matthew
Spring 2024	Cecil, Nicholas
Spring 2023	Ariza Mejia, Juan Felipe
Fall 2022	Bustos Gonzalez, Margarita
Fall 2022	Amaraweera, Niki
Summer 2022	Bryhtan, Zachary
Fall 2021	Sorsen, Rebecca
Spring 2021	Manuel Albrizzio
Fall 2020	Tang, Le
Spring 2020	Bianconi, Ryan
Spring 2019	Balz, Curtis
Spring 2019	Poudel, Anup
Fall 2018	Camacho, Nicholas
Fall 2018	Nevalainen, Shawn
Fall 2018	Wood, Adam
Spring 2018	Messmore, Mitchell
Spring 2018	Valentin De Jesus, Pedro
Fall 2017	Edison, Jeremy
Fall 2017	MacKinnon, Rebeccah
Fall 2016	Bombardier, Kevin
Fall 2016	Edmonds, Ranthony
Fall 2016	Ignacio, Paul
Fall 2015	Hasse, Erik
Fall 2015	Sistko, Alex
Fall 2014	Qin, Huan

PhD - Dissertation Committee Member

Spring 2024	Bryhtan, Zachary
Spring 2024	Sorsen, Rebecca
Summer 2023	Albrizzio, Manny
Summer 2023	Nguyen, Andy
Spring 2023	Paul, Pravakar
Summer 2022	Bianconi, Ryan
Summer 2022	Poudel, Anup
Summer 2022	Tang, Le
Spring 2022	Balz, Curtis
Spring 2022	Aceves, Elaina
Spring 2022	Reynolds, Tyler
Summer 2021	Valentin de Jesus, Pedro
Summer 2021	Connolly, Nicholas

Spring 2021	Bakhira, Mohamed Imad
Spring 2021	Nevalainen, Shawn
Spring 2021	Pongtanapaisan, Puttipong
Fall 2020	Camacho, Nicholas
Summer 2020	Wood, Adam
Spring 2020	Messmore, Mitchell
Summer 2019	Ignacio, Paul
Spring 2019	Bombardier, Kevin
Spring 2019	Edison, Jeremy
Spring 2019	Sistko, Alex
Summer 2018	Edmonds, Ranthony
Summer 2018	Hasse, Erik
Spring 2016	Abdulwahid, Adnan
Spring 2016	Gerstle, Kevin
Spring 2015	Meyer, David
Spring 2015	Salazar-Torres, Dido
Spring 2015	Soto, Roberto
Spring 2015	Wackwitz, Daniel

PhD - Fellowship Mentoring

Summer 2022	Kevin del Real Ramos, fellowship to prepare for Qualifying Exam
Fall 2021 - Present	Michele Capovilla-Searle, Lulu Merle Johnson Fellow
Fall 2021 – Present	Blend, Dylan, Lulu Merle Johnson Fellow (Physics & Astronomy)
Fall 2020 - Present	Tarrant, Kerry, Lulu Merle Johnson Fellow
Fall 2020 - Present	Bustos Gonzalez, Margarita, Lulu Merle Johnson Fellow
Fall 2020 - Present	Randall, Natalie, Lulu Merle Johnson Fellow
Fall 2019 - Present	Sauder, Joseph, Graduate College Recruitment Fellowship
Fall 2018 – Spring 2023	Gilbert, Cody, Graduate College Recruitment Fellowship
Fall 2018 – Spring 2023	Diaz, Yariana, Graduate College Recruitment Fellowship
Fall 2019 – Spring 2021	Velasco, Ulyses, Lulu Merle Johnson Fellow
September 2018 - October 2018	Diaz, Yariana, Support in preparing National Science Foundation Graduate Research Fellowship research proposal

Professional Mentoring

Postdoctoral

Fall 2018 - Summer 2019	Sen, Emre, Regular meetings to conduct research
Fall 2018 - Summer 2019	Zhu, Shijie, Occasional meetings for professional development

SCHOLARSHIP

Publications

CLAS * System * = Senior Author, Major Contribution,   ** = Secondary Contribution   *** = Equal Contribution,   **** = Minor Contribution

Refereed Articles

1. Kinser, R., Lara, D.   On Algebras of Finite General Representation type.   Accepted in *Transformation Groups*, March 2024, 27 pp.
2. * Kinser, R. (2022). Total stability functions for type A quivers. *Algebras and Representation Theory*, 25, 835–845
3. *** Kinser, R., Lorincz, A. (2022). Representation varieties of algebras with nodes. *Journal of the Institute of Mathematics of Jussieu*, 21(6), 2215-2245.
4. *** Kinser, R., Oswald, A. (2021). Hopf actions of some quantum groups on path algebras. *Journal of Algebra*, 587 (1 December 2021, 85-117)
5. *** Kinser, R., Rajchgot, J. (2021). Type D quiver representation varieties, double Grassmannians, and symmetric varieties. *Advances in Mathematics*, 376 (6 January 2021, 107454).
6. *** Etingof, P., Kinser, R., Walton, C. (2021). Tensor algebras in finite tensor categories. *International Mathematics Research Notices*, Volume 2021, Issue 24, December 2021, Pages 18529–18572
7. *** Carroll, A., Chindris, C., Kinser, R., Weyman, J. (2020). Moduli spaces of representations of special biserial algebras. *International Mathematics Research Notices*, 2020(2), 403-421.
8. *** Kinser, R., Weist, T. (2019). Tree normal forms for quiver representations. *Documenta Mathematica*, 24, 1245-1294.
9. *** Kinser, R., Knutson, A., Rajchgot, J. (2019). Three combinatorial formulas for type A quiver polynomials and K-polynomials. *Duke Mathematical Journal*, 168(4), 505-551.
10. *** Chindris, C., Kinser, R. (2018). Decomposing moduli of representations of finite dimensional algebras. *Mathematische Annalen*, 372(1-2), 555-580.
11. *** Kinser, R., Walton, C. (2016). Actions of some pointed Hopf algebras on path algebras of quivers. *Algebra & Number Theory*, 10(1), 117-154.
12. *** Chindris, C., Kinser, R., Weyman, J. (2015). Module varieties and representation type of finite-dimensional algebras. *International Mathematics Research Notices*, 2015(3), 631-650.
13. *** Kinser, R., Rajchgot, J. (2015). Type A quiver loci and Schubert varieties. *Journal of Commutative Algebra*, 7(2), 265-301.
14. Kinser, R. (2013). Tree modules and counting polynomials. *Algebras and Representation Theory*, 16(5), 1333–1347.
15. *** Kinser, R., Schiffler, R. (2012). Idempotents in representation rings of quivers. *Algebra & Number Theory*, 6(5), 967–994.
16. Kinser, R. (2011). New inequalities for subspace arrangements. *Journal of Combinatorial Theory Series A*, 118(1), 152–161.
17. Kinser, R. (2010). Rank functions on rooted tree quivers. *Duke Mathematical Journal*, 152(1), 27–92.
18. Kinser, R. (2008). The rank of a quiver representation. *Journal of Algebra*, 320(6), 2363–2387.

Conference Proceeding

1. Kinser, R. (2018). K-polynomials of type A quiver orbit closures and lacing diagrams. *Representations of Algebras* (vol. 705, pp. 99-114). Contemporary Mathematics.   Published May 2018
2. Beasley, N., Jantzi, J., Kinser, R., Olafsen, Jeffrey S. (2013). *Dilation, compression and convection in granular shear experiments* (1542nd ed., pp. 449-452). AIP Conference Proceedings.
(Result of undergraduate research at University of Kansas, 2000 to 2003.)

Research Report

1. Kinser, R. (2020). Tensor algebras in finite tensor categories. In *Representation Theory of Quivers and Finite Dimensional Algebras,* Oberwolfach Reports 17(1), 215-218.
2. Kinser, R. (2018). *Introduction to geometry of representations of algebras*.
In support of a 5 hour mini-course at the CIMPA international research school "Geometric and Homological Methods in the Representation Theory of Associative Algebras and Their Applications", held in Medellín, Colombia, June 2018
3. Kinser, R. (2017). A decomposition theorem for moduli of representations of algebras, with application to moduli of special biserial algebras. In *Representation Theory of Quivers and Finite Dimensional Algebras,*

Oberwolfach Reports 14(1), 622-624.

4. Kinser, R., Weyman, J. (2014). Irreducible components of some module varieties via the Springer resolution. In *Representation Theory of Quivers and Finite Dimensional Algebras,* Oberwolfach Reports 11(1), 475-477.

Ph.D. Thesis
1. Kinser, R. D. (2009). *Rank functors and representation rings of quivers* (pp. 131). ProQuest LLC, Ann Arbor, MI.

Publications In Progress
Journal Article
1. Kinser, R., Lanini, M., Rajchgot, J. Equivariant Geometry of Symmetric Quiver Orbit Closures. *Preprint available upon request, 20 pp.*
2. Diaz, Y., Gilbert, C., Kinser, R.   Total Stability and Auslander-Reiten Sequences for Dynkin Quivers.   *Preprint arXiv:2208.02445, 15 pp., submitted.*

Grants and Contracts
Funded
Sep 2023 – Aug 2026 *Quivers in quantum symmetry: a path algebra framework for algebras in tensor categories.*
NSF DMS-2303334 ($298,003).   Ryan Kinser (PI).

Fall 2021 – June 2025 *Recruiting and Training Community College and University Students to Become Culturally Responsive and Proficient Mathematics Teachers in Iowa.*
NSF DUE-1852725 ($1,233,606).   Dae Hong (PI), Patsy Steffen (Co-PI), Ryan Kinser (Co-PI), Julie Hartzler (Co-PI), Gregory Beaudine (Co-PI).

Sep 2019 - Aug 2024 *Quiver representations across geometry and algebra: equivariant K-theory, moduli spaces, and tensor categories.*
Simons Foundation Collaboration Grant ($42,000).   Ryan Kinser (PI).

Sep 2018 - Aug 2022 *Conference on Geometric Methods in Representation Theory 2018 and 2019.*
NSF DMS-1839720 ($11,836). Ryan Kinser (PI), Frauke Bleher (Co-PI).

Sep 2016 - Aug 2019 *Conference on Geometric Methods in Representation Theory 2016 and 2017.*
NSF DMS-1644393 ($11,285). Ryan Kinser (PI), Frauke Bleher (Co-PI).

Jan 2012 - Jan 2014 *Quiver Representations: Algebra, Geometry, and Combinatorics*
NSA Young Investigator Grant H98230-12-0244 ($39,399). Ryan Kinser (PI).

Not Funded (with submission dates)
Oct 2020 *Bridging Theory and Applications: Quiver Representations in Data Science*
Simons Foundation-Fellows in Mathematics ($85,406). Ryan Kinser (PI).

Feb 2020 *NRT: Comprehensive Training in Mathematical and Computational Neuroscience*
NSF DMS-2021860 ($2,990,852).   Maggy Tomova (PI), Zahra Aminzare (Co-PI), Rodica Curtu (Co-PI), Ryan Kinser (Co-PI), Colleen Mitchell (Co-PI).

Nov 2017 *U.S. Participation in CIMPA Summer Research School and in the Third International Colloquium on Representation of Algebras and Its Applications Alexander Zavadskij*
NSF DMS-1810597 ($19,406). José Vélez (PI), Ryan Kinser (Co-PI).

Oct 2017 *Representations of Finite-Dimensional Algebras (a Geometric Perspective)*
NSF DMS-1801830 ($231,733). Ryan Kinser (PI).

Jul 2017 *CAREER: Representations of Finite-Dimensional Algebras (a Geometric Perspective)*
NSF DMS-1751916 ($427,569). Ryan Kinser (PI).

Oct 2015 *Geometry of Representations of Algebras*
NSF DMS-1601249 ($129,819). Ryan Kinser (PI).

Oct 2014 *Geometry of Representations of Algebras*
NSF DMS-1502175 ($124,494). Ryan Kinser (PI).

Invited Lectures and Conference Presentations
International - Colloquium
2017 Mathematics Department Colloquium, University of Saskatchewan, Saskatoon, Canada

International – Summer School

2018	Geometric and Homological Methods in the Representation Theory of Associative Algebras and Their Applications, *Geometry of representations of algebras*, CIMPA (Centre International de Mathématiques Pures et Appliquées), Medellín, Colombia. 5 hour short course.

International - Invited Lecture

2023	Joint Spectra and related Topics in Complex Dynamics and Representation Theory, Banff International Research Station for Mathematical Innovation and Discovery, Canada
2022	Noncommutative Geometry and Noncommutative Invariant Theory, Banff International Research Station for Mathematical Innovation and Discovery, Canada
2021	Algebra, Geometry, and Combinatorics online seminar; organized by universities across the USA and Canada
2020	IV Colloquium on Representations of Algebras and Its Applications; Alexander Zavadskij, National University of Colombia
2020	Representation Theory of Quivers and Finite Dimensional Algebras, Oberwolfach Mathematical Research Institute, Oberwolfach, Germany
2017	US-Mexico Conference on Representation Theory, Categorification, and Noncommutative Algebra, Universidad Nacional Autónoma de México, Mexico City, Mexico
2017	Algebra Extravaganza!, Temple University
2017	Maurice Auslander Distinguished Lectures and International Conference, Woods Hole, Massachusetts
2017	Representation Theory of Quivers and Finite Dimensional Algebras, Oberwolfach Mathematical Research Institute, Oberwolfach, Germany
2015	International Conference on Representation Theory and Commutative Algebra, Storrs, Connecticut
2015	Maurice Auslander Distinguished Lectures and International Conference, Woods Hole, Massachusetts
2014	Conference on cluster algebras and representation theory, Korea Institute for Advanced Study, Seoul, Korea
2014	UNAL Encuentro de Matemáticas, Universidad Nacional de Colombia, Bogotá, Colombia
2014	Representation Theory of Quivers and Finite Dimensional Algebras, Oberwolfach Mathematical Research Institute, Oberwolfach, Germany
2013	Geometric Methods in Representation Theory, University of Missouri, Columbia, Missouri, United States
2013	25th Meeting on Representation Theory of Algebras, Université de Sherbrooke, Sherbrooke, Canada
2013	17th NW German Representation Ring Workshop, Bergische Universität Wuppertal, Wuppertal, Germany
2012	Geometric Methods in Representation Theory, University of Missouri, Columbia, Missouri, United States
2012	Worldwide Center of Mathematics, Cambridge, Massachusetts
2012	International Conference on Representations of Algebras, Bielefeld University, Bielefeld, Germany
2012	Maurice Auslander Lectures and International Conference, Northeastern University, Woods Hole, Massachusetts
2011	Maurice Auslander Lectures and International Conference, Northeastern University, Woods Hole, Massachusetts
2010	Maurice Auslander Lectures and International Conference, Northeastern University, Woods Hole, Massachusetts
2009	21st Meeting on Representation Theory of Algebras, Université de Sherbrooke, Sherbrooke, Canada
2008	International Conference on Representations of Algebras XIII, Universidade de São Paulo and Instituto de Matemática e Estatística, São Paulo, Brazil
2008	Maurice Auslander Lectures and International Conference, Northeastern University,

Woods Hole, Massachusetts

International - Keynote/Plenary Address

2020   GAAG 2020 - Workshop on Geometry in Algebra and Algebra in Geometry, Universidade Federal Fluminense, Niterói, Brazil 90 minute panoramic lecture

2016   International Conference on Representations of Algebras, Syracuse University, Syracuse, New York, United States One of 12 plenary lectures selected from 150 submitted abstracts

International - Panel

2021   Podium discussion on the future of online events and meetings in general, TRAC seminar (Théorie des Représentations et ses Applications et Connexions aux autres domaines)

International - Seminar

2017   University of Saskatchewan AGeNT seminar, Saskatoon, Canada

2015   Algebra and Geometry Seminar, Sapienza University of Rome, Rome, Italy

2013   Representation Theory seminar, Bielefeld University, Bielefeld, Germany

2007   Complex Geometry seminar, Pontificia Universidad Católica de Chile, Santiago, Chile

National - Colloquium

2021   Mathematics Department Colloquium, Northern Illinois University

2017   Mathematics Department Colloquium, Depaul University

2011   Mathematics Department Colloquium, Tufts University

National - Invited Lecture

2024   Qua-Sy Con II, University of Notre Dame

2022   AMS special session "Combinatorics and Representations of Noncommutative Algebras", Purdue University (virtual)

2019   AMS special session "Lie Representation Theory", University of Wisconsin-Madison

2018   AMS special session "Commutative Algebra and Complexity", University of Michigan

2015   Midwest Combinatorics Conference, University of Minnesota, Minneapolis, Minnesota, United States

2015   AMS special session "Topics in noncommutative algebra and algebraic geometry", Michigan State University

2013   ALGECOM 9, Loyola University, Chicago, Illinois, United States

2011   AMS special session "Noncommutative Algebra", Wake Forest University

2011   AMS special session "Representations of Algebras", University of Iowa

2010   AMS special session "Representations of Finite-Dimensional Algebras", Syracuse University

2009   AMS special session "Representations of Finite-Dimensional Algebras", U. California, Riverside

2009   AMS special session "Algebra, Geometry, and Combinatorics", U. Illinois, Urbana-Champaign

National - Panel

2018   How to prepare for your first professional position, at Math Alliance Field of Dreams conference

National - Seminar

2022   AGNT Seminar, Rice University, Houston, Texas

2016   University of Illinois Algebra-Geometry-Combinatorics Seminar, Urbana, Illinois

2015   Cluster Algebras seminar, University of Connecticut, Storrs, Connecticut

2014   Every Topic seminar, Brandeis University, Waltham, Massachusetts

2012   Representation Theory seminar, City University of New York, Graduate Center, New York, New York

2012   Algebra seminar, University of Missouri, Columbia, Missouri

2012   Algebraic Geometry seminar, Princeton University, Princeton, New Jersey

2010   Algebra seminar, Syracuse University

2010	Representation Theory seminar, University of Massachusetts, Amherst
2010	Algebra seminar, University of Kansas
2010	GASC seminar, Northeastern University
2008	Algebra seminar, DePaul University

National - Workshop

2022	Supporting Minority Mentoring & Recruitment Across the Continuum. Guided Conversation Co-Facilitator at Math Alliance Field of Dreams conference
2022	Policies for Successful Graduate Programs - Minority Mentoring & Retention. Guided Conversation Facilitator at Math Alliance Field of Dreams conference
2019	Creating and supporting an inclusive mathematical community through our professional environment. Design and facilitation of Early Career Faculty Workshop session at the Underrepresented Students in Topology and Algebra Research Symposium (USTARS)

SERVICE

Profession

2020 - 2024	FD Seminar, Co-Organizer, weekly online research seminar
2019 - Present	Math Alliance, Mentor, Mentoring students in Facilitated Graduate Admissions Process (4 completed)
2016 - Present	American Mathematical Society Math Reviews, Reviewer (35 publications reviewed)
2024	Underrepresented Students in Topology and Algebra Research Symposium (USTARS), local organizer
2024	Selecta Mathematica, Reviewer (Quick opinion)
2024	Algebras and Representation Theory, Reviewer (Quick opinion)
2024	Communications in Algebra, Reviewer (Quick opinion)
2023	NSF CAREER panel, Reviewer
2023	Communications in Algebra, Reviewer (Quick opinion)
2023	International Mathematics Research Notices, Reviewer (Quick opinion)
2023	Mathematische Zeitschrift, Reviewer (Quick opinion)
2023	Journal of the American Mathematical Society, Reviewer
2023	Notices of the American Mathematical Society, Reviewer
2023	Journal of Algebra and Applications, Reviewer (Quick opinion)
2023	Journal of Algebra, Reviewer (Quick opinion)
2023	Journal of Lie Theory, Reviewer (Quick opinion)
2023	Communications in Algebra, Reviewer (Quick opinion)
2022	Épijournal de Géométrie Algébrique, Reviewer (Quick opinion)
2022	Bulletin of the London Mathematical Society, Reviewer
2022	Banff International Research Station, Workshop proposal reviewer
2022	Forum of Mathematics Sigma, Reviewer (Quick opinion)
2022	Science China Mathematics, Reviewer (Quick opinion)
2022	Mathematische Zeitschrift, Reviewer (Quick opinion)
2022	Israel Journal of Mathematics, Reviewer (Quick Opinion)
2022	Journal of the American Mathematical Society, Reviewer
2022	Advances in Mathematics, Reviewer (Quick Opinion)
2022	Bulletin of the London Mathematical Society, Reviewer

2022	Journal of Algebra and Applications, Reviewer
2021	FONDECYT (National Fund for Scientific and Technological Devleopment) Chile, Grant reviewer
2021	Algebras and Representation Theory, Reviewer
2021	Journal of the London Mathematical Society, Reviewer
2021	AMS, Special Session: Quiver Representations: Bridging Theory and Application, Organizer
2020	Mathematische Zeitschrift, Reviewer (Quick opinion)
2020	Journal of the London Mathematical Society, Reviewer (Quick opinion)
2020	Mathematische Zeitschrift, Reviewer (Quick opinion)
2020	Notices of the AMS, Reviewer
2020	Proceedings of the AMS, Reviewer
2020	Sao Paulo Journal of Mathematical Sciences, Reviewer
2020	Universidad Nacional de Colombia, Member, Doctoral thesis jury, Robinson Julián Serna Vanegas
2020	Universidad Nacional de Colombia, Doctoral thesis jury, Gabriel Bravo Rios, Member, Doctoral thesis jury, Gabriel Bravo Rios
2019	Geometric Methods in Representation Theory Conference, Co-Organizer (at University of Missouri)
2019	Homological Methods and Tilting Theory of Finite Dimensional Algebras, Organizing Committee
2019	Nagoya Mathematical Journal, Reviewer
2019	Proceedings of the AMS, Reviewer
2018	Geometric Methods in Representation Theory Conference, Chair
2018	Documenta Mathematica, Reviewer
2018	Proceedings of the AMS, Reviewer, 2 articles
2018	International Mathematics Research Notices, Reviewer
2018	Journal of Commutative Algebra, Reviewer
2017	Geometric Methods in Representation Theory Conference, Chair
2017	International Mathematics Research Notices, Reviewer
2017	Journal of Commutative Algebra, Reviewer
2009 - 2017	Zentralblatt, Reviewer, Publications, Reviewed 16 articles
2016	Geometric Methods in Representation Theory Conference, Co-Organizer (at University of Missouri)
2016	Algebras and Representation Theory, Reviewer
2016	Representation Theory, Reviewer
2016	Special Session: Noncommutative Algebras and their Representations, Organizer
2015	IEEE Transactions on Information Theory, Reviewer
2015	Journal of Algebra, Reviewer
2013	Advances in Mathematics, Reviewer
2013	Contemporary Mathematics, Reviewer
2013	Special Session: Geometric Complexity Theory, Organizer, In conjunction with an AMS Mathematics Research Community
2011	Communications in Algebra, Reviewer

2010	Journal of Pure and Applied algebra, Reviewer

Department

Jan 2023 - Present	Department of Mathematics Chair (DEO)
2018 - 2023	Director of Diversity, Equity, and Inclusion in Mathematics
2014 - Present	Algebra seminar, Co-Organizer
Fall 2022	Graduate Committee, Member
2022	Ph.D. student recruitment at Field of Dreams conference
2021	Ph.D. student recruitment at Field of Dreams conference (virtual)
2021	Wrote majority of Learning Outcomes and Assessment report for Graduate College
2021	Coordinated extension of mentoring system to all incoming Math PhD students in conjunction with AAU PhD Education Initiative (beginning Summer 2021)
2021	Enrollment Committee
2021	Third Year Review for Zahra Aminzare, Member
2019 - 2020	Faculty Committee (2020 Strategic Plan), Member
2017 - 2020	Graduate Committee
2020	Ph.D. student recruitment at Field of Dreams conference (virtual)
2020	Ph.D. student recruitment trip to Puerto Rico
2019	Ph.D. student recruitment at Field of Dreams conference
2016 - 2019	Executive Committee
2015 - 2018	Committee for Diversity and Inclusion, Member
2018	Ph.D. student recruitment at Field of Dreams conference
2017	Ph.D. student recruitment at Field of Dreams conference
2017	Bylaws Committee
2015 - 2017	Hiring Committee
2014 - 2016	Mathematics Colloquium Committee, Co-Chair
2016	Ph.D. student recruitment trip to Puerto Rico
2015	Reading Seminar: Quantum Nilpotent Algebras, Organizer
2011 - 2014	Quivers and Invariant Theory seminar, Organizer, (Northeastern University), Invited speakers and local graduate students give weekly talks
2010	Reading Seminar: Monoidal Categorification, Organizer, (University of Connecticut), Combining faculty expertise to understand a recent breakthrough in cluster algebras

College

Fall 2023	CLAS Commencement Ceremony, Platform Official
2023	Search Committee for Mathematics, Chemistry, Physics & Astronomy Senior Advisor
2023	Panelist, NSF-GRFP Information Session organized by CLAS
2023	Presentation at February CLAS DGS meeting on Inclusive Recruitment and Holistic Admission in graduate programs
2021	Co-organizer of "Can We Talk?" film screening and panel discussions, as part of CLAS Theme Year "Pursuing Racial Justice at Iowa"
2020 - 2023	CLAS - Diversity, Equity, and Inclusion Committee, Member

University

2023 - Present	Native American Council, Member
2024	D.C. Spriestersbach Dissertation Prize Committee, Member
2024	28th Annual UI Powwow Committee, Fundraising Chair
2023 - 2024	Excellence in Teaching & Learning DEO Action Group, Member
2021 - 2023	Diversity, Equity, and Inclusion Success Collaborative (DEISC), Member
2023	Co-organizer of STEM Celebration of MLK "Social responsibility in STEM" discussion panel, featuring panelists from across U. Iowa (joint with College of Engineering)
2022	Lead organizer of STEM Celebration of MLK lecture by Tracy Jon Sargent, Executive Director of Multicultural Development Center of Iowa (joint with College of Engineering)
2021	Lead organizer of STEM Celebration of MLK "Service through STEM" discussion panel

feature panelists from CLAS, Engineering, and U. Iowa Division of DEI (joint with College of Engineering)

2020   Lead organizer of STEM Celebration of MLK lecture by UI Provost Montse Fuentes

2019   Lead organizer of STEM Celebration of MLK lecture by entrepreneur and Iowa PhD graduate Paulette Willis

Professional Development Activities

2019 - Present   BUILD certificate, University of Iowa, Certificate completed Fall 2019, with 11 total training courses completed

2017 - Present   Conference Participant, annual Field of Dreams conference, National Alliance for Doctoral Studies in the Mathematical Sciences

2024   Big Ten Academic Alliance DEO Program, Participant

2024   Invited Workshop Participant, Representation Theory and Topological Data Analysis, Banff International Research Station for Mathematical Innovation and Discovery

2023 - 2024   Iowa Academic Leadership Academy, Participant

2023   Crucial Conversations Workshop, Participant

2023   Invited Workshop Participant, Joint Spectra and related Topics in Complex Dynamics and Representation Theory, Banff International Research Station for Mathematical Innovation and Discovery

2022   Invited Workshop Participant, Noncommutative Geometry and Noncommutative Invariant Theory, Banff International Research Station for Mathematical Innovation and Discovery

2020   Invited Workshop Participant, Representation Theory of Quivers and Dimensional Algebras, Oberwolfach Mathematics Research Institute

2020   Training/Development Program, UI LEAD (Leadership Education, Assessment, and Development), University of Iowa Human Resources

2019   Workshop Participant, Write Winning Grant Proposals

2019   Invited Workshop Participant, Multivariable Spectral Theory and Representation Theory, Banff International Research Station for Mathematical Innovation and Discovery

2017   Invited Workshop Participant, Representation Theory of Quivers and Dimensional Algebras, Oberwolfach Mathematics Research Institute

2014   Invited Workshop Participant, Representation Theory of Quivers and Dimensional Algebras, Oberwolfach Mathematics Research Institute

2013   Invited Research Visit (2 months), Bielefeld University

2010   Invited Research Visit (2 weeks), Syracuse University