CONTACT	Iowa State Univesity address in Fall 2020	dwight@mathdwight.com mathdwight.com

RESEARCH

Theory of Mathematics
Lie superalgebras, super representation theory, Adinkras, connections between geometry and quantum groups and superalgebras and mathematical physics

Community of Mathematicians
culture and practices of graduate mathematics programs, mathematicians within the African diaspora, equity in mathematics, historical mathematics, mentoring, tutoring, creativity and freedom through mathematics

EDUCATION

The University of Texas at Arlington, Arlington, TX

Ph.D., Mathematics, May 2020

Bases of infinite-dimensional representations of orthosymplectic Lie superalgebras

Advisor: Dimitar Grantcharov

The Florida State University, Tallahassee, FL

M.S., Pure Mathematics, May 2014

Florida A&M University, Tallahassee, FL

B.S., Mathematics, April 2012

EMPLOYMENT

Postdoctoral Research Associate (ECR-EHR Core Research Grant)   2020 – 2022
Iowa State University, Ames, Iowa
Supervisor: Michael Young
Research Mentor: Jonas Hartwig

DISTINCTIONS

The University of Texas at Arlington
Graduate Assistance in Areas of National Need (GAANN) Fellow   2017 – 2020
Outstanding GAANN Student, Department of Mathematics   2020
Peer Mentor Award, Department of Mathematics   2018

American Mathematical Society
Joint Mathematics Meetings Travel Grant   2019
International Congress of Mathematicians Travel Grant   2018

MEDIA

Research Publications

1. (In preparation; Joint with D. Grantcharov) Bases of infinite-dimensional tensor product representations of $\mathfrak{osp}(1|2n)$.

News and Education

1. The International Congress of Mathematicians: A Math Conference for Everybody. (2018, Winter). *NAM Newsletter*. Retrieved from http://www.nam-math.org/include/pages/files/newsletters/2018 Winter.pdf

2. CPALMS Perspectives Videos (2015) *Carbon foam and geoemetry*. Available at: https://www.cpalms.org/Public/PreviewResourcePerspectivesVideo/Preview/128676

Equity

2020

1. *Fostering Equity in the STEM Classroom*   Jun
   Led by Mathematics Enrichment for Diversity and Learning (Aris Winger)
   Governor's STEM Advisory Council, State of Iowa (Virtual)

2. *Black in Stem* focused on Black undergraduates of the Claremont Colleges   Mar
   Hosted by Edray Goins, Pomona College

3. *Research and Graduate Programs*—one FAMU alumnus' POV   Feb
   Kemetic Mathematical Society, Florida A&M University (Virtual)

2019

4. "*...a Noether one...*: the lives of Malone-Mayes, Mirzakhani, & Noether",   Mar
   AMS UTA Graduate Seminar, The University of Texas at Arlington

Mathy

2020

5. "*It looks like calculus*: Lie superalgebras acting on polynomials   Mar
   in commuting and anti-commuting variables"
   Colloquium, California State Polytechnic University, Pomona

6. "Finding bases of new infinite dimensional representations of $\mathfrak{osp}(1|2n)$"   Mar
   Algebra/Number Theory/Combinatorics Seminar, Claremont Colleges

7. "Basis of an infinite-dimensional tensor product representation   Jan
   of $\mathfrak{osp}(1|2n)$",
   The Joint Mathematics Meetings 2020, Denver, Colorado

2019

8. "Infinite-dimensional tensor product representations   Dec
   of $\mathfrak{osp}(1|2n)$ and $\mathfrak{gl}(2n)$",
   Algebra and Geometry Seminar, Iowa State University

9. "Bases of infinite-dimensional tensor product representations   Nov
   of $\mathfrak{osp}(1|2n)$",
   Representation Theory Seminar, Baylor University

10. "*Incompleteness theorem*: a graduating graduate student's   Oct
    hard-knocks lessons",
    Discussions in Algebra (DinA), The University of Texas at Arlington

11. "Basis of an infinite-dimensional tensor product representation   Oct
    of $\mathfrak{osp}(1|2n)$",
    Algebra Seminar, University of North Texas

12. "Super Black Magic",   Oct
    Graduate Algebra Symposium, Texas A&M University

13. "Infinite-dimensional tensor product representations   Aug
    of orthosymplectic Lie superalgebras",
    Comprehensive Exam, The University of Texas at Arlington

14. "*Keeping up with the signs*:
    examples of Lie superalgebras and their representations",   Mar
    Colloquium, Sam Houston State University

15. "Infinite-dimensional representations of $\mathfrak{osp}(1|2n)$",   Feb
    Southwest Local Algebra Meeting, The University of Texas at El Paso

2018

16. "Infinite-dimensional representations of $\mathfrak{osp}(1|2n)$",   Nov
    Blackwell-Tapia Conference, ICERM

17. "Tensor product representations of $\mathfrak{osp}(1|2n)$",   Nov
    Discussions in Algebra (DinA), The University of Texas at Arlington

18. "Angles of Andy... simple roots",   Apr
    Discussions in Algebra (DinA), The University of Texas at Arlington

19. "Gelfand-Tsetlin subalgebras",   Mar
    Discussions in Algebra (DinA), The University of Texas at Arlington

2017

20. "Supermathematics...",   Oct
    UNT UTA OU Algebra Symposium, University of Oklahoma

21. "Superalgebras"   Oct
    Discussions in Algebra (DinA), The University of Texas at Arlington

22. "Magmas, loops, and other not-quite groups",   Apr
    UNT UTA OU Algebra Symposium, The University of Texas at Arlington

23. "Solutions to Hungerford exercises on *Hom and Duality*"   Feb
    Discussions in Algebra (DinA), The University of Texas at Arlington

2016

24. "Survey of algebraic objects"   Oct
    Discussions in Algebra (DinA), The University of Texas at Arlington

2013

25. "A complex investigation of Pythagorean triples",   Nov
    Complex Analysis Seminar, The Florida State University

2011

26. "Cyclotomy and representation Theory",   Jul
    Iowa Summer Research Symposium, University of Iowa

ACTIVITIES

Conferences, Seminars, Symposiums

Geometric Representation Theory
Perimeter Institute for Theoretical Physics (June 2020, virtual)
Twinned conference: Max Planck Institute

Joint Mathematics Meetings 2020
AMS National Meeting (January 2020)
Denver, Colorado

Graduate Algebra Symposium XIV
Texas A&M University (October 2019)

NAM Undergraduate MATHFest XXIX
Southern University of New Orleans (September 2019)

Southwest Local Algebra Meeting
The University of Texas at El Paso (February 2019)

Blackwell-Tapia Conference 2018
ICERM (November 2018)

UNT UTA OU Algebra Symposium XII
The University of Texas at Arlington (October 2018)

NAM Undergraduate MATHFest XXVIII
Spelman College (September 2018)

Lie and Jordan Algebras, their Representations and Applications VIII
Satellite Conference ICM
Cusco, Peru (August 2018)

International Congress of Mathematicians
Rio de Janeiro, Brazil (August 2018)

Texas-Oklahoma Representations and Automorphic Forms (TORA) IX
University of Oklahoma (April 2018)

UNT UTA OU Algebra Symposium X
University of Oklahoma (October 2017)

Lie Algebras, Superalgebras, and Applications
AMS Fall Central Sectional Meeting
University of North Texas (September 2017)

UNT UTA OU Algebra Symposium IX
The University of Texas at Arlington (April 2017)

Algebra Seminar
University of North Texas (2017 - present)

UNT UTA OU Algebra Symposium VIII
University of North Texas (November 2016)

Discussions in Algebra (DinA)
The University of Texas at Arlington (2016 - present)

Schools, Trainings, Workshops

Southeastern Lie Theory Workshop XI
   "Geometric and Categorial Representation Theory"
   Louisiana State University (May 2019)

Representation Theory, Combinatorics, and Geometry
   University of Virginia (October 2018)

Common Misconceptions in Undergraduate Mathematics Classrooms
   Center for the Integration of Research, Teaching, and Learning
   The University of Texas at Arlington (Fall 2018)

Mathematics Education: Teaching Tips for Graduate Students
   Center for the Integration of Research, Teaching, and Learning
   The University of Texas at Arlington (Fall 2018)

2018 RTG Summer School
   "Lie Theory"
   University of Georgia (June 2018)

"Introduction to Git and GitHub"
   The University of Texas at Arlington (April 2018)

"ABCs of DMPs: Introduction to creating effective data management plans",
   The University of Texas at Arlington (March 2018)

"Introduction to Python",
   The University of Texas at Arlington (March 2018)

"Intro to Pivot - Funding",
   The University of Texas at Arlington (February 2018)

"Publishing Your First Article",
   The University of Texas at Arlington (February 2018)

"Shaping Your Academic Digital Identity",
   The University of Texas at Arlington (February 2018)

TEACHING

Instructor of Record

   Summer 2017 – Fall 2017 & Fall 2018 – Spring 2020

      Business Calculus - The University of Texas at Arlington
      Calculus III (2 sections) - The University of Texas at Arlington
      College Algebra (Pilot) - The University of Texas at Arlington
      Linear Algebra (2 sections) - The University of Texas at Arlington
      Preparation for Calculus - The University of Texas at Arlington

   Fall 2015 – Spring 2016

      Business Calculus (4 sections) - Florida A&M University
      Intermediate Algebra (2 sections) - Florida A&M University

Guest Lecturer

Abstract Algebra (Graduate) - The University of Texas at Arlington
Lie Algebras (Graduate) - The University of Texas at Arlington

Contemporary Mathematics - The University of Texas at Arlington
Number Theory - The University of Texas at Arlington

Teaching Assistant

Fall 2016 – Spring 2017 & Spring 2018

Preparation for Calculus (6 sections) - The University of Texas at Arlington

Fall 2012 – Spring 2014

Analytic Trigonometry (11 sections) - The Florida State University
Calculus for Business (8 sections) - The Florida State University
College Algebra (11 sections) - The Florida State University
Precalculus Algebra (5 sections) - The Florida State University

Grader

Spring 2018 & Spring 2019

Linear Algebra - The University of Texas at Arlington

SERVICE

Professional

Organizer
American Mathematical Society UTA Graduate Chapter

- Founding president and website creator
- Graduate Student Seminar

Visitors/Speakers

- Mayowa Awe, Lockheed Martin
- Edray Goins, Purdue University (Currently: Pomona College)
- Mark Jackson, Raytheon
- Craig J. Sutton, Dartmouth College
- Talitha Washington, Howard University & National Science Foundation

Discussions in Algebra (DinA)

- Scheduled speakers for DinA at The University of Texas at Arlington

Grad2Grad

- Coordinated a peer-to-peer studying collaborative for graduate Linear Algebra and Analysis

Panelist/Moderator
National Association of Mathematicians

- NAM Undergraduate MATHFest XXIX, Southern University of New Orleans
- NAM Undergraduate MATHFest XXVIII, Spelman College

The University of Texas at Arlington Department of Mathematics

- GAANN Day 2018
- Gulf States Math Alliance Conference
- GAANN Day 2016

National Alliance for Doctoral Studies in the Mathematical Sciences

- Fifth Annual Mathematical Field of Dreams Conference, Arizona State University

Committee Member
Mathematics Faculty Search Committee

- Represented students in evaluating candidates for faculty positions in the Department of Mathematics at Florida A&M University

Community

K-12 Mentor
Mid-Cities Math Circle $(MC)^2$

- Promoter of problem solving and mathematical fun amongst youth

R. Frank Nims Middle School (Tallahassee, FL)

- Created STEM lesson plans and taught 15 eighth graders on Saturday mornings

Local Volunteer
Dallas-Fort Worth Metroplex

- UT Arlington Calculus Bowl set-up crew member and pizza server
- Forth Worth Regional Science Fair safety inspector

Advisor and Undergraduate Mentor
Florida-Georgia Louis Stokes Alliance for Minority Participation (LSAMP)

- Adapted program as a recognized student organization (RSO) at The Florida State University
- Mentored 30 undergraduates from underrepresented backgrounds in scientific fields

Memberships

American Mathematical Society (National and Graduate Student Chapters)

Association for Women in Mathematics

Benjamin Banneker Association, Inc.

College of Science Black Graduate Student Association

National Association of Mathematicians

Skills

Computer software/languages
Active Projects: LaTeX
Past Projects: Access, APL, C, Excel, Maple, Matlab, Maple,