Dwight Anderson Williams II, PhD (he/his)

Curriculum Vitæ Summary Extended Curriculum Vitæ homepage

arXiv: arxiv.org/a/williams_d_5.html

GitHub: mathdwight

ORCID: 0000-0003-2611-2388

Google: Scholar Zotero: mathdwight

Department of Mathematics Morgan State University 1700 E Cold Spring Lane, Baltimore, MD 21251

Dwight.WilliamsII@morgan.edu

Professional Appointments

2023-curr	Assistant Professor, Morgan State University.
2022-2023	Visiting Assistant Professor, Pomona College.
2022-2022	Facilitator, Charles A. Dana Center (Math Leaders 4 Racial Justice).
2020-2021	Postdoc Research Associate, Iowa State University. Supervisor: Michael Young.
2021-2021	Postdoctoral Research Advisor , Mathematical Sciences Research Institute Undergraduate Program. Supervisors: Rebecca E. Garcia & Pamela E. Harris.
2016-2020	Graduate Teaching Assistant, The University of Texas at Arlington.

Education

- 2016-2020 **PhD in Mathematics**, The University of Texas at Arlington. Advisor: Dimitar Grantcharov.
- 2012-2014 MS in Pure Mathematics, The Florida State University.
- 2008-2012 **BS in Mathematics**, Florida A&M University.

Research Highlights

Co-author names: alphabetical in mathematics; pre-baccalaureate/pre-doctoral by date of submission

In Mathematics

2023 Interval and ℓ-interval Rational Parking Functions (Manuscript).

arXiv: 2311.14055.

Aguilar-Fraga, T; Elder, J; Garcia, RE; Hadaway, KP; Harris, PE; Harry, KJ; Hogan, IB; Johnson, J; Kretschmann, J; Lawson-Chavanu, K; Martínez Mori, JC; Monroe, CD; Quiñonez, D; Tolson III, D; Williams II, DA.

2023 On parking functions and the Tower of Hanoi.

American Mathematical Monthly. DOI: 10.1080/00029890.2023.2206311.

Aguillon, Y; Alvarenga, D; Harris, PE; Kotapati, S; Martínez Mori, JC; Monroe, CD; Saylor, Z; Tieu, C; Williams II, DA.

2023 Ghost center and representations of the diagonal reduction algebra of $\mathfrak{osp}(1|2)$.

Journal of Geometry and Physics. DOI: 10.1016/j.geomphys.2023.104788.

Hartwig, JT; Williams II, DA.

2022 Diagonal reduction algebra for $\mathfrak{osp}(1|2)$.

Theoretical and Mathematical Physics. DOI: 10.1134/S0040577922020015 (for Russian version) Hartwig, JT; Williams II, DA.

In Education

2021 Informing Change: Stories of Graduate Students from Underrepresented Groups in Mathematics Doctoral Programs.

Association for the Study of Higher Education 46th General Conference. Program book. Westine, C; Sword, S; Young, M; *Bartel, M*; Williams II, DA; Harris, PE.

2021 Studying Successful Doctoral Students in Mathematics from Underrepresented Groups.

Accelerating Systemic Change Network (ASCN) & Network of STEM Education Centers (NSEC) Transforming Institutions Conference 2021. Poster webpage.

Sword, S; Young, M; Westine, C; Winger, A; Bartel, M; Williams II, DA; McRoberts, C; Sisneros-Thiry, S; Gates, M; Harris, PE.

Exposition

2022 People Over Math: A Co-created Principle for Successful Research Communities.

MAA FOCUS. Digital edition.

Garcia, RE; Harris, PE; Williams II, DA; Martínez Mori, JC; Monroe, CD; Aguilar-Fraga, T; Aguillon, Y; Alofamoni Quiñonez, D; Alvarenga, D; Celestine, A; Gill, P; Hogan, IB; Johnson, J; Lawson-Chavanu, K; Liu, L; Ortiz, A; Quesada, L; Rivera Sánchez, CM; Soto, C; Tieu, C; Tolson III, D; van der Leeuw, J; Vargas, P.

Instructor of Record

Morgan State University

Graduate: MATH 505 Abstract Algebra I, MATH 506 Abstract Algebra II.

Undergraduate: MATH 413 Algebraic Structures I, MATH 431 Mathematical Theory of Statistics, MATH 432 Mathematical Theory of Statistics II.

Pomona College

Undergraduate: MATH PO 032 Calculs III, MATH 101 PO Introduction to Analysis, MATH 171 PO Abstract Algebra I: Groups & Rings.

The University of Texas at Arlington

Undergraduate: MATH 1302 College Algebra, MATH 1316 Mathematics for Economics and Business Analysis, MATH 1421 Preparation for Calculus, MATH 2326 Calculus III, MATH 3330 Introduction to Matrics & Linear Algebra.

Advising

Undergrad

2024-curr	Twymun Safford.	Angeluis	Savavongsa-	Vaughn.	Morgan State	University. MANIM.

- 2023-2023 Irmak Bukey, Gisele Umutoni. Pomona College. MANIM (reduction algebras, trees, proofs).
- 2022–2023 Irmak Bukey, Pomona College. Senior Thesis: Reduction Algebras: Verifying Solutions to Laplace's Equation.
- 2022-2023 Andrew Shannon, Pomona College. Senior Theis: The Diffie-Hellman Problem in Lie Algebras Revisited.
- 2021–2021 Aaron Ortiz, Lauren J. Quesada, Cynthia Marie Rivera Sánchez. Mathematical Sciences Research Institute Undergraduate Program. Research Report: The defective parking space.
- 2021–2021 Tomás Aguilar-Fraga, Kobe Lawson-Chavanu, Dirk Tolson III. Mathematical Sciences Research Institute Undergraduate Program. Research Report: \(\ell \)-Interval parking functions.

Sample of Service

Committee	Actuarial Science (Department-special), Graduate Comprehensive Exam (Department-standing), Graduate

Curriculum (Department-standing).

Membership American Mathematical Society, Mathematical Association of America, National Association of

Mathematicians.

Organizer Fresh Researchers in Algebra, Combinatorics, and Topology Active Learning Seminar, AMS Spring Eastern

Sectional (Howard University) Special Session.

Referee Communications in Algebra.