Dwight Anderson Williams II, PhD

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Department of Mathematics
Morgan State University
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Professional Appointments

2023–curr	**Assistant Professor**, Morgan State University.
2022–2023	**Visiting Assitant 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 (MSRI-UP). 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: **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

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 (English) DOI: 10.4213/tmf10138 (Russian)
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, 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, Morgan State University. MANIM.
2024-curr.   Angeluis Sayavongsa-Vaughn, Morgan State University. MANIM.
2023-2023   Irmak Bukey, Pomona College. MANIM (reduction algebras).
2023-2023   Gisele Umutoni, Pomona College. MANIM (trees and 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, Mathematical Sciences Research Institute (MSRI-UP). Research Report: The defective parking space.
2021-2021   Lauren J. Quesada, Mathematical Sciences Research Institute (MSRI-UP). Research Report: The defective parking space.
2021-2021   Cynthia Marie Rivera Sánchez, Mathematical Sciences Research Institute (MSRI-UP). Research Report: The defective parking space.
2021-2021   Tomás Aguilar-Fraga, Mathematical Sciences Research Institute (MSRI-UP). Research Report: ℓ-Interval parking functions.
2021-2021   Kobe Lawson-Chavanu, Mathematical Sciences Research Institute (MSRI-UP). Research Report: ℓ-Interval parking functions.
2021-2021   Dirk Tolson III, Mathematical Sciences Research Institute (MSRI-UP). Research Report: ℓ-Interval parking functions.

Organizing Currently

2024   Fresh Researchers in Algebra, Combinatorics, and Topology Active Learning Seminar.
2024   AMS Spring Eastern Sectional (Howard University) Special Session