Portia X. Anderson

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Education

Cornell University, Ithaca, NY
Advisor: Allen Knutson
MS in Mathematics – received June 2022
PhD in Mathematics – in progress
Smith College, Northampton, MA
Center for Women in Mathematics Post-Baccalaureate Program

2012–2016 Johns Hopkins University, Baltimore, MD BS in Biomedical Engineering, Minors in Mathematics and Robotics

Papers

Edge-swapping symmetries of Knutson-Tao puzzles, in preparation Generalized Splines on Graphs and Polynomial Splines on Cycles, *arXiv*, with Julianna Tymoczko and Jacob Matherne

Invited Talks

- Dec. 2022 "Edge-swapping symmetries of Knutson-Tao puzzles with hexagonal and parallelogram-shaped boundary", Schubert Seminar
- Dec. 2022 "Schubert calculus and edge-swapping symmetries of Knutson-Tao puzzles", Combinatorics seminar, University of Minnesota
- Sept. 2022 "Schubert Calculus with Puzzles: a dialogue between geometry and combinatorics", *Route 81 Conference*, Queen's University
- Aug. 2017 "Splines on Arbitrary Graphs with Two Distinct Degree-2 Polynomial Edge Labels", The 5th Northeast Mathematics Undergraduate Research Mini-Symposium, University of Connecticut
- July 2017 "Splines on Graphs with Two Distinct Degree-2 Polynomial Edge Labels", Summer Combo, University of Vermont
- April 2017 "Results on Splines", Hudson River Undergraduate Mathematics Conference, Westfield State University
- Jan. 2017 "An Introduction to Splines", Joint Mathematics Meetings, Atlanta, GA

— Service, Mentorship, & Outreach

- 2022-present President, The Association for Women in Mathematics, Cornell chapter
 2019–2020 ZigZag Mentoring Program Coordinator, The Association for Women in Mathematics, Cornell chapter
 - 2019–2020 Volunteer, Girls' Math Circle, Cornell University