

LEWIS DOMINGUEZ

OCTOBER 5, 2023

Department of Mathematics
University of Kentucky
Lexington, KY 40506

Phone: 937-546-4263
Website: <https://www.ms.uky.edu/~ltdo224/>
E-mail: Lewis.Dominguez@uky.edu

EDUCATION

University of Kentucky, Lexington, KY

- Mathematics, Ph.D Expected May 2024

University of Kentucky, Lexington, KY

- Mathematics, M.A. Dec. 2020

Indiana University of Pennsylvania, Indiana, PA

- Mathematics, B.S. Aug. 2018

MATHEMATICAL RESEARCH: INTERESTS AND PUBLICATIONS

Research Interests

- My major work focuses on Burnside rings and representation rings, their roles in algebra and topology, and particularly about operations on them.

INVITED TALKS AND WORKSHOPS

Talks:

- A Novel Functor from Commutative Rings to Categories, Morehead University Undergraduate Seminar Mar. 2023
- Adams operations on $A(G)$ through power operations, UVA Topology Seminar Sep. 2023
- A Factorization of the Adams operation on the Burnside ring through the power operation, UCLA Topology Seminar Oct. 2023

CONTRIBUTED RESEARCH TALKS AND WORKSHOPS

Talks:

- Adams operations on $A(G)$ through power operations, UKY Topology Seminar, Dec. 2023
- Introductions to λ -rings and a concrete formula for the Burnside Ring, UKY Topology Seminar, Sep. 2022
- Commutative Rings Associated to Groups and their relations, UKY Topology Seminar, Jan. 2022
- Adams Operations & Power Operations on the Burnside Ring, UKY Topology Seminar Sep. 2021
- A Power Operation on the Table of Marks, UKY Topology Seminar, Nov. 2020
- Representations of Real Numbers using a Finite Sum of Elements From An Open Set, Youngstown University, Feb. 2018

Panels:

- Experienced Teaching Assistant Ask-All Sep. 2023
- Implementing student-centered assessment Apr. 2023
- Graduate Student Panel on Research and Study Aug. 2022

SERVICE

- UKY Mathematics Department Graduate Student Council Co-Chair 2023-Present
- UKY Graduate Student Peer Mentor 2018-Present
- UKY MathLab Summer Undergraduate Research Leader 2022

AWARDS

- Arts and Sciences Outstanding Teaching Assistant Award 2023
 - One of 15 awarded in the entire UKY College of Arts and Sciences
- Wimberly C. Royster Outstanding Teaching Assistant Award 2022

TEACHING EXPERIENCE

Primary Instructor: Present course material, facilitate discussion, construct and administer assessments, determine student grades

- University of Kentucky
 - MA 111 Contemporary Mathematics (2)
 - MA 241 Geometry for Middle School Teachers
 - MA 109 College Algebra with Co-requisite Support - Includes an additional two contact hours each week, and makes use of standards based grading.

Advanced Instruction: Specialized assignments outside of traditional course scheduling

- University of Kentucky
 - UKY First Year Graduate Student Seminar Leader - A weekly seminar for first year graduate students, teaching skills relevant for adjusting to the program and growing as a researcher in mathematics.
 - MA 113 Calculus I Math Excel (Recitation Leader) - Includes an additional recitation with worksheets tailored to current student needs

Recitation Leader: Lead students in completing worksheets, assist with homework questions, and foster discussion regarding prior lectures

- University of Kentucky
 - MA 110 - Pre-Calculus
 - MA 113 - Calculus I
 - MA 114 - Calculus II
 - MA 123 - Elementary Calculus
 - MA 213 - Calculus III