

# Samuel Wilson

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## Education

May 2023

### Doctorate of Philosophy in Mathematics

Louisiana State University, Baton Rouge, LA

Advisor: Dr. Siu-Hung “Richard” Ng

Dissertation:  $SL_2(\mathbb{Z})$ -Representations and 2-Semiregular Modular Categories

May 2013

### Master of Science in Mathematics

Texas State University, San Marcos, TX

Advisor: Dr. Daniela Ferrero

Thesis: Power Domination on Permutation Graphs

December 2010

### Bachelor of Arts in Mathematics (with Honors); Minor in Japanese

University of Oklahoma, Norman, OK

Studied abroad at Karl Franzens Universität; Graz, Austria & University College Cork; Cork, Ireland

## Publications and Presentations

### Publications

(2023). Symmetric representations of  $SL_2(\mathbb{Z})$ . *Proceedings of the American Mathematical Society*, 151(4), 1415–1431. (with Dr. Siu-Hung Ng and Dr. Yilong Wang)

(2019). Power Domination on Permutation Graphs. *Discrete Applied Mathematics*, 262, 169–178.

### Presentations

(April 2022). Representations of  $SL_2(\mathbb{Z})$  and applications for modular tensor categories. *Joint Mathematics Meeting AMS Special Session on Hopf Algebras and Tensor Categories*.

(March 2021). Symmetrization of representations of  $SL_2(\mathbb{Z})$ . *LSU Algebra and Number Theory Seminar*.

(March 2021). Representations of  $SL_2(\mathbb{Z})$  and Applications to Modular Categories. *AMS Spring Eastern Sectional Meeting*.

### Other Work

(2022). SL2Reps: Constructing symmetric representations of  $SL(2, \mathbb{Z})$ , Version 1.1. GAP Package.  
<https://snw-0.github.io/sl2-reps>. (with Dr. Siu-Hung Ng and Dr. Yilong Wang)

## Awards and Honors

Spring 2019 David Oxley Graduate Student Teaching Award

Fall 2018 Certificate of Teaching Excellence

Spring 2012 Outstanding Graduate Academic Achievement Award

## Teaching Experience

August 2017–current

**Graduate Assistant**, Louisiana State University Mathematics Department, Baton Rouge, LA

Supervisor: Dr. Steven Shipman · shipman@math.lsu.edu · (225) 578-1674

### Courses taught:

- College Algebra
- Plane Trigonometry
- The Nature of Mathematics
- Differential and Integral Calculus

### Service:

- Served as grader for graduate-level Algebra I. (Fall 2022)
- Mentored three junior Ph.D. candidates in teaching and academics. (Fall 2022)
- Served on the organizing committee for the GEAUX orientation program for incoming graduate students. Gave numerous talks on teaching, academics in general, and graduate-level algebra in specific. Served as the chair, organizing events and activities for roughly 20 incoming students, in Fall 2020. (2019-2021)
- Helped organize the LSU High School Mathematics Contest. (2018-2019)

September 2013–May 2017

**Lecturer**, Texas State University Mathematics Department, San Marcos, TX

Supervisor: Dr. Susan Morey · (512) 245-2551

### Courses taught:

- College Algebra
- Math for Business and Economics I
- Math for Business and Economics II
- Survey of Contemporary Mathematics
- Calculus for Life Sciences I

January 2011–December 2012

**Instructional Assistant**, Texas State University Mathematics Department, San Marcos, TX

Supervisor: Dr. Susan Morey · (512) 245-2551

### Courses taught:

- Elementary Algebra
- Intermediate Algebra
- College Algebra

## References

**Dr. Siu-Hung “Richard” Ng**

Professor

Louisiana State University

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**Dr. James Oxley**

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**Dr. Pramod Achar**

Professor

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