

# JAMES MCKEOWN

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## EDUCATION

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**Ph.D.** *August 2012 - Present*  
Mathematics. University of Miami. Coral Gables, FL.  
Advisor: Drew Armstrong

**M.S.** *August 2012 - May 2014*  
Mathematics. University of Miami. Coral Gables, FL.

**B.S.** *August 2008 - May 2012*  
Mathematics Statistics and Music. University of Minnesota Duluth. Duluth, MN.

## TECHNICAL STRENGTHS

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<b>Computer Languages</b>	C/C++, Javascript, LAMP, Python, Tensorflow
<b>Software &amp; Tools</b>	LaTeX, Sage, Mathematica, Maple, R

## RESEARCH INTERESTS

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My main research interest is **algebraic combinatorics**. I am particularly interested in the combinatorics of **discrete reflection groups** and how it relates to **representation theory**, **partial orders**, **hyperplane arrangements**, and **matroids**.

## COURSES TAUGHT

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Math 162, University of Miami, Fall 2017

Independent instructor for the course Math 162 (Calculus II) at The University of Miami. The position involved teaching three 75-minute lectures per week, holding office hours, setting homework and quizzes, assisting in setting and grading the preliminary and final exams.

Math 161, University of Miami, Fall 2016

Independent instructor for the course Math 161 (Calculus I) at The University of Miami. The position involved teaching four one hour lectures per week, holding office hours, setting homework and quizzes, assisting in setting and grading the preliminary and final exams.

Math 107 University of Miami, Spring 2016

Independent instructor for the course Math 107 (pre-calculus) at The University of Miami. The position involved teaching three one hour lectures per week, holding office hours, setting homework and quizzes, assisting in setting and grading the preliminary and final exams.

## OTHER TEACHING EXPERIENCE

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Teaching assistant for Calculus I and II (2012-2015)

Worked in a computer lab assisting students with Mathematica, Sage, and other math software.

Private tutoring for GRE prep, modern algebra, linear algebra, probability and statistics, etc. (2012-present)

## **SPEAKING OPPORTUNITIES**

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- [12] AMS Eastern Section Meeting, Polynomials in Enumerative, Algebraic, and Geometric Combinatorics. Buffalo, NY. September 2017
- [11] Formal Power Series and Algebraic Combinatorics. London, UK. July 2017
- [10] University of South Carolina Graduate Student Seminar. Columbia, SC. April 2017 (invited)
- [9] Graduate Student Combinatorics Conference. Laurence, KS. April 2017
- [8] 48th Southeastern International Conference on Combinatorics, Graph Theory & Computing, Boca Raton, FL. March 2017
- [7] Free Probability Seminar, Universität des Saarlandes, Saarbrücken, Germany. November 2016
- [6] AMS Central Section Meeting, Enumerative Combinatorics. Minneapolis, MN. October 2016
- [5] MMMM Combinatorics Graduate Student Workshop. Winnipeg, MB. Canada April 2016
- [4] Graduate Student Combinatorics Conference. Clemson, SC. April 2016
- [3] Combinatorics Seminar University of Miami. Coral Gables, FL. March 2016
- [2] AMS Southeastern Sectional Meeting, The Combinatorics of Symmetric Functions. Athens, GA. March 2016 (Invited)
- [1] Graduate Student Seminar University of Miami. Coral Gables, FL. February 2016

## **PROFESSIONAL MEMBERSHIPS**

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American Mathematical Society

## **SERVICE**

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Organizer for the University of Miami Graduate Student Seminar 2016-present  
Systems administrator for Graduate Student Seminar website

## **WORKSHOPS/SUMMER SCHOOLS ATTENDED**

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Geometric and Enumerative Combinatorics, IMA, Minneapolis, MN. November 10-14, 2014  
Algebraic and Geometric Combinatorics of Reflection Groups Workshop, Montreal, CA. June 5-June 9, 2017

## **AWARDS**

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Graduate Student Fellowship, University of Miami. 2012-2017.  
Alworth Scholarship (\$20,000) for exceptional undergraduate students in math and science. 2008-2012.  
Best in Class Scholarship Half-tuition for four years at University of MN, Duluth 2008-2012

## **REFERENCES**

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Drew Armstrong, University of Miami, [armstrong@math.miami.edu](mailto:armstrong@math.miami.edu)  
Dalibor Froncek, University of Minnesota Duluth, [froncek@d.umn.edu](mailto:froncek@d.umn.edu)