

# Donald Adams

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## Personal

Born on February 12, 1986.

United States Citizen.

Married June 18, 2011.

## Education

Ph.D. Mathematics, Arizona State University, in progress.

M.A. Mathematics, San Diego State University, 2010.

*Thesis:* Structure of Minimal Zero-Sum Sequences of Maximal Length in  $\mathbb{Z}/n\mathbb{Z} \oplus \mathbb{Z}/n\mathbb{Z}$ .

*Committee:* Vadim Ponomarenko (chair), Robert Grone, Carl Eckberg

B.S. Applied Mathematics with emphasis in Physics, San Diego State University, 2008.

## Employment

Adjunct Faculty Member, Maricopa Community College District, August 2016–present

Graduate Teaching Assistant, Arizona State University, August 2012–May 2016

Research Assistant, Dr. Wayne Raskind, Arizona State University, January 2011–August 2012.

Graduate Teaching Assistant, Arizona State University, August 2010–December 2011.

Graduate Teaching Assistant, San Diego State University, August 2008–May 2010.

Undergraduate Research Assistant, San Diego State University, September 2007–May 2008, with Roxana Smarandache (advisor) and Ryan Rosenbaum.

## Research Interests

Number Theory

Algebraic Geometry

Arithmetic Geometry

Complex Geometry

Commutative Algebra

## Publications

### *Journal Articles*

Number Theory of Matrix Semigroups (with R. Ardila, N. Baeth, D. Hannasch, A. Kosh, H. McCarthy, V. Ponomarenko, R. Rosenbaum) *Journal of Linear Algebra and its Applications* (434) 2011, 694–711.

Distinct Solution to a Linear Congruence (with V. Ponomarenko) *Involve* 3 (3) 2010, 341–344.

Bifurcus Semigroups and Rings (with R. Ardila, D. Hannasch, A. Kosh, H. McCarthy, V. Ponomarenko, R. Rosenbaum) *Involve* 2 (3) 2009, 351–356.

## Teaching

### *Maricopa Community College District*

Introductory Algebra, South Mountain Community College and Scottsdale Community College, Spring 2017, Instructor, 2 sections

Intermediate Algebra, Scottsdale Community College, Spring 2017, Instructor

Introductory Algebra, South Mountain Community College, Fall 2016, Instructor, 2 sections

Trigonometry, Scottsdale Community College, Fall 2016, Instructor

### *Arizona State University*

Calculus for Engineers II (Ph.D.), Spring 2016(A), Online Instructor

Calculus with Analytic Geometry (Ph.D.), Fall 2015, Teaching Assistant for Richard Ruedemann

Calculus for Engineers III (Ph.D.), Summer 2015(B), Online Instructor

Introduction to Smooth Manifolds (Ph.D.), Spring 2015, Teaching Assistant for Brett Kotschwar

Brief Calculus (Ph.D.), Fall 2014, Online Instructor

Introduction to Mathematical Writing (Ph.D.), Spring 2014, Teaching Assistant for Katie Kolossa

Calculus for Engineers II (Ph.D.), Fall 2013, Instructor

Calculus for Engineers II (Ph.D.), Summer 2013, Instructor

Abstract Algebra (Ph.D.), Spring 2013, Teaching Assistant for Nancy Childress

Abstract Algebra (Ph.D.), Fall 2012, Teaching Assistant for Nancy Childress

Abstract Algebra (Ph.D.), Fall 2011, Teaching Assistant for John Jones

Calculus for Engineers I (Ph.D.), Spring 2011, Instructor

Calculus for Engineers I (Ph.D.), Fall 2010, Instructor

*San Diego State University*

Calculus III (M.A.), Spring 2010, Teaching Assistant for Mark Dunster and Tunc Geveci.

Pre-Calculus (M.A.), Fall 2009, Instructor.

Calculus I (M.A.), Summer 2009, Instructor.

Calculus III (M.A.), Spring 2009, Teaching Assistant for Mark Dunster and Tunc Geveci.

Calculus III (M.A.), Fall 2009, Teaching Assistant for Paul Brock and John Elwin.

**Seminar Talks**

Scheme Theory and Lifting Varieties (3 talks)

School of Mathematical and Statistical Sciences, Arizona State University, 2015.

Class Field Theory Seminar (7 talks), organized with Scott Zinzer

School of Mathematical and Statistical Sciences, Arizona State University, 2013.

Structure of Minimal Zero-Sum Sequences of Maximal Length in  $\mathbb{Z}/n\mathbb{Z} \oplus \mathbb{Z}/n\mathbb{Z}$

School of Mathematical and Statistical Sciences, Arizona State University, 2010.

Factorization in Certain Matrix Semigroups

Research Symposium, San Diego State University, 2009.

Rank of Generalized Circulant Matrices

Research Experience for Undergraduates and Teachers, San Diego State University, 2009.

**Conferences Attended**

Joint Mathematical Meetings, Seattle, WA, January 5-9, 2016

Curves and Automorphic Forms, Arizona State University, March 10-14, 2014

Conference on Stark's Conjecture and Related Topics, University of California, San Diego, September 20-22, 2013

AMS Fall Western Sectional Meeting, University of Arizona, Tucson, AZ, October 27-28, 2012

Iwasawa 2012, University of Heidelberg, Heidelberg, Germany, July 30 - August 3, 2012

Southern California Number Theory Day, University of California, San Diego, February 16, 2012

Iwasawa Theory, University of Arizona, Tucson, AZ, October 15-16, 2011

## Workshops Attended

Arizona Winter School, Southwest Center for Arithmetic Geometry, Tucson, AZ, March 14-18, 2015

Arizona Winter School, Southwest Center for Arithmetic Geometry, Tucson, AZ, March 9-13, 2013

Iwasawa 2012, University of Heidelberg, Heidelberg, Germany, July 23-27, 2012

Noncommutative Geometry, Mathematical Sciences Research Institute, Berkeley, CA, June 19-29, 2012

Arizona Winter School, Southwest Center for Arithmetic Geometry, Tucson, AZ, March 10-14, 2012

## Service

Volunteer, Math Club, Arcadia High School, Phoenix, AZ with Barbara Thomas, 2014.

Graduate TA Leader, Teaching Assistant Training and Orientation, School of Mathematical and Statistical Sciences, Arizona State University, 2012-present.

## Honors, Awards, & Grants

University Graduate Fellowship Block Grant, Research Assistant, Arizona State University, 2011.

Advisor: Wayne Raskind

NSF Research Experience for Undergraduates and Teachers, Graduate Assistant, San Diego State University, 2008.

Most Outstanding Baccalaureate in Mathematics, San Diego State University, 2008.

## Programming/Computing Languages

Ruby, Go, PostgreSQL since 2015

Python, Django since 2014

HTML, CSS, JavaScript, PHP, Sass, Compass since 2013

C/C++, since 2011

Sage, since 2010

Magma, since 2008

Java, since 2008