

Department of Mathematics
University of Washington, Seattle WA 98125
skayf@uw.edu

EDUCATION

Ph. D. Mathematics (Expected)

University of Washington

Advisor: Jayadev Athreya (email: *jathreya@uw.edu*)**B.A. Mathematics, May 2015**

Houghton College

Class Valedictorian, summa cum laude

Honors Thesis Advisor: Dr. Rebekah Yates*Honors Project:* Variations on multiplicative preservers of the C -numerical range and radiusTEACHING
EXPERIENCE**Math 324 (Multivariable Calculus)**

Lecturer: Au 2017

Math 124 (Differential Calculus and Analytic Geometry)

Teaching Assistant: Au 2016, Su 2016, Au 2015

Math 125 (Integral Calculus)

Teaching Assistant: Sp 2016, Wi 2016

Math 126 (Taylor Series and Vector Calculus)

Teaching Assistant: Sp 2017

Math 112 (Business Calculus)

Teaching Assistant: Wi 2017

RELEVANT
WORK
EXPERIENCE**Undergraduate Teaching Assistant, August 2012- May 2015**

Houghton College

Grader for Calculus I and II, Linear Algebra

In-Class TA for Calculus I

Help Sessions for Calculus I,II, Linear Algebra, and Differential Equations

Tutoring for Calculus II

HONORS AND
AWARDS*McKibben and Merner Fellow*

University of Washington, 2016

Outstanding Senior in Mathematics

Houghton College, May 2015

Hazel L. Crocker Mathematics Scholarship

Houghton College, 2012-2015

President's List for 4.0 GPA

Houghton College: Fall 2011, 2012; Spring 2012, 2013,2014, 2015

Extra Mile in Mathematics Award

Houghton College, 2014

Outstanding Homework in Number Theory in the Spirit of Ramanujan

Pennsylvania State University MASS Program, 2013

Outstanding Sophomore in Mathematics

Houghton College, 2013

- SERVICE *Served as a referee for:*
 Expositiones Mathematicae (Summer 2017)
- Washington Experimental Mathematics Lab (WXML) Mentor*
 Counting k -tuples in Discrete Sets (Autumns 2017)
 Trees, Forests, and Entropy (Winter 2017)
 Limiting Behavior in Infinite Graphs (Autumn 2016)
- PRESENTATIONS *The Hyperbolic Geometry of irrational Numbers*
 Graduate Student Analysis Seminar, University of Washington, 6 April 2017
- The Cantor Function*
 EDGE Final Presentations, Howard University, 25 June 2015
- The Abelian Sandpile Model on Fractal Graphs*
 2015 February Fourier Talks, University of Maryland, 19 February 2015
 2015 Joint Mathematics Meetings, 13 January 2015
 2014 REU Summer Undergraduate Research Forum, Cornell University, 7 August 2014
- Rigidity Results for Tilings by L -Tiles and Notched Rectangles*
 2014 MAA Undergraduate Poster Session, Joint Mathematics Meetings, 17 January 2014
 2013 Shenandoah Undergraduate Mathematics and Statistics Conference Poster Session,
 James Madison University, 28 September 2013
 Undergraduate Research Poster Session,
 The Pennsylvania State University, 2 August 2013.
- Rigid Tilings of Quadrants by L -ominoes and Notched Rectangles*
 MASS Fest Conference, The Pennsylvania State University, 7 August 2013
 Shenandoah Undergraduate Mathematics and Statistics Conference,
 James Madison University, 28 September 2013
- MEMBERSHIPS American Mathematical Society
 Association for Women in Mathematics
 Sigma Zeta National Science and Mathematics Honor Society
- ACADEMIC
EXPERIENCES *Enhancing Diversity in Graduate Education (EDGE) Program*
 Howard University, June 2015
- Cornell 2014 Summer REU Program*
 Cornell University, Summer 2014
- SAMSI Interdisciplinary Undergraduate Workshop*
 Data Modeling with Networks, North Carolina State University, May 2014
- Mathematics Advanced Study Semester*
 The Pennsylvania State University, Fall 2013
- 2013 Summer REU Program*
 The Pennsylvania State University, Summer 2013
- RESEARCH *The Abelian Sandpile Model on Fractal Graphs*

RESULTS Pre-print, Joint with Robert Strichartz, Rafael Setra, Travis Westura, Ilse Haim.

CONFERENCES *2015 February Fourier Talks*
ATTENDED University of Maryland, 19-20 February 2015.

AMS/MAA Joint Mathematics Meetings
Seattle 2016, San Antonio 2015, Baltimore 2014.

2014 REU Summer Undergraduate Research Forum
Cornell University, 7 August 2014.

Cornell Conference on Analysis, Probability, and Mathematical Physics on Fractals
Cornell University, 11-15 June 2014.

Shenandoah Undergraduate Mathematics and Statistics Conference
James Madison University, 28 September 2013.

MASS Fest Conference
The Pennsylvania State University, 7 August 2013.