Josiah Reiswig

Curriculum Vitae

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Columbia, SC 29208

Education

2015-: Ph. D. in Mathematics, University of South Carolina-Columbia (USC)

Expected: August 2019. Thesis Advisers: Éva Czabarka and László Székely.

Qualification Study: Analysis, Algebra.

Comprehensive Study: Discrete Mathematics, Model Theory, Probability Theory

2011-2015: B. A. in Mathematics, Minnesota State University-Moorhead (MSUM).

Summa Cum Laude.

Academic Positions

2015-: Teaching Assistant, USC.

Served as instructor of record or teaching assistant for one class each semester.

2011-2015: Mathematics Tutor, MSUM.

Worked with students in remedial courses to complete problem based worksheets during class.

Publications

- 5) J. R., On the k-Steiner Radius and k-Steiner diameter of connected graphs where k > 5, In preparation.
- 4) É. Czabarka, J. R., L. A. Székely, The Steiner distance problem for large subsets in the hypercube. *submitted*.
- 3) É. Czabarka, J. R., L. A. Székely, Zhiyu Wang, Midrange crossing numbers of graph classes. *Submitted*, arXiv:1811.08071.
- 2) S. Erickson, A. Goyt, J. R., Aphid sequences: turning Fibonacci numbers inside out, *Mathematics Magazine* 91 (2018), no. 3, 198–205.
- 1) R. Doughty, J. Gonda, A. Morales, B. Reiswig, J. R., K. Slyman, D. Pritikin, Arranging kings k-dependently on hexagonal chessboards. *Involve* 9 (2016), no. 4, 699–713.

Academic Projects and Professional Development

Fall 2018-: Graduate Student Representative to USC Graduate Mathematics Committee. Elected student representative of the graduate advisory committee at USC.

Fall 2018: Precalculus Problem Based Learning Reviewer, USC.

Reviewed, edited, and implemented problem based Precalculus curriculum designed to enable novice graduate students to employ problem based teaching in Precalculus.

2016-2017: Peer Mentorship Program Mentee, USC.

Met with experienced graduate students and a cohort of novice graduate students to discuss and improve our student-centered instruction.

Teaching Experience (Instructor of record unless as otherwise stated)

Term	\mathbf{Course}	Instructor Overall (out of 5)
Spring 2019:	MATH 122 (Business Calculus), USC.	Not yet evaluated
Fall 2018:	MATH 115 (Precalculus), USC.	4.57
Sum 2018:	MATH 242 (Differential Equations), USC.	4.52
Spr 2018:	MATH 115 (Precalculus), USC.	4.81
Fall 2017:	MATH 111 (Basic College Mathematics), USC.	4.38
Sum 2017:	MATH 142 (Calculus II), USC.	4.74
Spr 2017:	MATH 170 (Finite Mathematics), USC.	4.82
Fall 2016:	MATH 111 (Basic College Mathematics), USC.	4.57
Sum 2016:	MATH 142 (Calculus II), USC.	4.69
Spr 2016:	Teaching Assistant for two sections of MATH 141 (C	Calculus I), USC. N/A
Fall 2015:	Teaching Assistant for two sections of MATH 141 (C	Calculus I), USC. N/A

Summer Schools and Research Experiences

- Sum 2019: (Accepted) Graduate Research Workshop in Combinatorics (GRWC). University of Kansas.
- Sum 2018: NSF-CBMS Conference on Additive Combinatorics from a Geometric Viewpoint (NSF-CBMS), USC.
- Sum 2016: Connecticut Summer School in Number Theory (CTNT), University of Connecticut.
- Sum 2015: Nebraska IMMERSE, University of Nebraska-Lincoln.
- Sum 2014: Summer Undergraduate Mathematical Science Research Institute (SUMSRI), University of Miami-Ohio.

Short Courses Completed

- Sum 2018: Short course in Additive Geometry, NSF-CBMS.
- Sum 2016: Short courses in Number Theory, CTNT.
- Sum 2015: Short courses in Algebra and Analysis, Nebraska IMMERSE.
- Sum 2014: Short courses in Algebra and Analysis, SUMSRI.

Research Talks

- Spr 2019: USC Discrete Math Seminar. On the k-Steiner radius and k-Steiner diameter of connected graphs with k > 5, March 22nd, 2019.
- Spr 2019: 50th Southeastern International Conference on Combinatorics, Graph Theory & Computing, On the k-Steiner radius and k-Steiner diameter of connected graphs with $k \geq 5$, March 5th, 2019.
- Fall 2018: USC Student Discrete Math Seminar. Results Related to the Steiner Distance of Connected Graphs, A series of five talks given in Fall 2018.
- Spr 2017: USC Discrete Math Seminar. Arranging kings k-dependently on hexagonal chess boards, January 27, 2017.

Talks for a General Mathematics Audience

- Spr 2019: USC Gamecock Math Club/Pi Mu Epsilon Student Seminar, The Steiner radius and Steiner diameter of Connected Graphs OR How I Learned to Stop Worrying and Solve Problems, March 26, 2019.
- Fall 2018: Anderson University Math Club, *Graduate School in Math*, Anderson, South Carolina, October 19, 2018.
- Fall 2017: USC Graduate Student Math Colloquium, *Aphid Sequences*, Columbia, South Carolina, October 10, 2017.
- Spr 2016: USC Graduate Student Math Colloquium, Arrow's Impossibility Theorem and the Theory of Social Choice, Columbia, South Carolina, April 12, 2016.

Poster Presentations

Jan 2015: Joint Mathematics Meetings. Arranging kings k-dependently on hexagonal chessboards. Student Poster Presentation. San Antonio, Texas. Jan 12, 2015.

Conferences Attended

- Spr 2019 50th Southeastern International Conference on Combinatorics, Graph Theory & Computing, Florida Atlantic University, Boca Raton, Florida, March 4-8, 2019.
- Fall 2017: Atlanta Lecture Series in Combinatorics and Graph Theory XX, Georgia Institute of Technology, Atlanta, Georgia, Sep 30-Oct 1, 2017.
- Spr 2017: Spring Southeastern Sectional Meeting, College of Charleston, Charleston, South Carolina, March 10-12, 2017.
- Spr 2017: Joint Mathematics Meetings, Atlanta, Georgia, Jan 4-7, 2017.
- Sum 2016: CTNT 2016 Research Conference: Elliptic Curves, Modular Forms and Related Topics, University of Connecticut, Hartford, Connecticut, August 12-14, 2016
- Spr 2016: Triangle Lecture Series in Combinatorics and Graph Theory. University of North Carolina-Greensboro, Greensboro, North Carolina, Feb 27, 2016.
- Spr 2015: Joint Mathematics Meetings, San Antonio, Texas, Jan 10-13, 2015.

Department Services and Outreach

- Spr 2019: AP Calculus BC Review Session at Ben Lippen HS. Columbia, SC, February, 2019.
- Spr 2019: USC High School Math Competition, volunteer test proctor, January 2019.
- Spr 2018: Pi Mu Epsilon/Gamecock Math Club Integration Bee, volunteer grader, April 2018.
- Spr 2018: USC High School Math Competition, volunteer test proctor, January 2018.
- Spr 2017: USC High School Math Competition, volunteer test proctor, January 2017.

Memberships

American Mathematical Society Society for Industrial and Applied Mathematics

Computer Skills

LATEX, Maple, Python, Excel.