

Claire Plunkett

Department of Mathematics, University of Utah
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RESEARCH INTERESTS

Mathematical biology, applied mathematics, stochastic processes, biophysics

EDUCATION

Ph.D. Student, Mathematics, expected May 2023 2018–present
University of Utah. Salt Lake City, Utah
Advisor: Sean Lawley

B.S., Applied Mathematics 2014–2018
Case Western Reserve University, Cleveland, Ohio
Concentration: Mathematical Biology
Minor: Anthropology

Study Abroad Fall 2016
National University of Singapore, Singapore

PUBLICATIONS & PREPRINTS

C. E. Plunkett and S. D. Lawley. “Boundary Homogenization for Trapping Rates of Two Patchy Objects”. In preparation.

C. E. Plunkett and S. D. Lawley. “Bimolecular binding rates for pairs of spherical molecules with small binding sites”. Submitted. <https://arxiv.org/abs/2002.11703>.

A. Downing, C. Jackson, **C. Plunkett**, J. Ackerman, S. Schlater, and M. Leibold. “Temporal stability versus community matrix measures of stability and the role of weak interactions”. *Ecology Letters*, in press.

M. Cinkoske, J. Jackson, and **C. Plunkett**. “On the Speed of an Excited Asymmetric Random Walk”. *Rose-Hulman Undergraduate Mathematics Journal* 19(1): 2018. <https://arxiv.org/abs/1708.08576>.

TALKS & POSTERS

Impact of Intraspecific Variation on Extinction Risk April 2018
C. Plunkett and R. Snyder
Poster at CWRU Intersections: SOURCE Symposium and Poster Session
Cleveland, OH

On the Speed of an Excited Asymmetric Random Walk July 2017
M. Cinkoske, J. Jackson, and **C. Plunkett**
Presentation at MAA MathFest 2017 with M. Cinkoske and J. Jackson
Chicago, IL

On the Speed of an Excited Asymmetric Random Walk July 2017
M. Cinkoske, J. Jackson, and **C. Plunkett**
Poster at 2017 Indiana Undergraduate Mathematics Conference with M. Cinkoske and J. Jackson
West Lafayette, IN

TEACHING EXPERIENCE	<i>Teaching Assistant, University of Utah</i> 2019
	<ul style="list-style-type: none"> • Vector Calculus and Partial Differential Equations for Engineers (MATH 3140 and MATH 2310) Laboratory Instructor
	<i>Teaching Assistant, Case Western Reserve University</i> 2016
	<ul style="list-style-type: none"> • Dynamics of Biological Systems I (BIOL 300) Teaching Assistant
HONORS & AWARDS	<i>NSF Graduate Research Fellowship Program Honorable Mention</i> 2020
	<i>RTG Summer Lab Rotation, Biology Laboratory (PI: Markus Babst)</i> 2019
	<ul style="list-style-type: none"> • \$5,000 • Approximately 5 RTG lab rotation awards are offered per academic year
	<i>NSF Research Training Grant Fellowship RTG-1148230</i> 2018–2019
	<ul style="list-style-type: none"> • \$20,000 • Approximately 5 RTG awards are offered per academic year
	<i>J. Paul Visscher Memorial Award</i> 2018
	<ul style="list-style-type: none"> • Awarded for outstanding ability and promise in the field of ecology or environmental science to a senior or graduate student
<i>Max Morris Prize</i> 2018	
<ul style="list-style-type: none"> • Awarded for excellence in mathematics to a student graduating with a B.S. in Mathematics or Applied Mathematics 	
<i>Patricia B. Kilpatrick Award</i> 2018	
<ul style="list-style-type: none"> • Awarded to the four-year varsity participant with the highest grade point average 	
<i>Phi Beta Kappa</i> 2017	
SERVICE	<i>Association for Women in Mathematics</i> 2018–present
	University of Utah, Salt Lake City, UT
	<ul style="list-style-type: none"> • Vice President, 2020–present • Secretary, 2019–2020 • Created and managed the first monthly newsletter for our chapter members, featuring chapter events as well as information on relevant events, opportunities, and resources • Peer mentor to undergraduate women in mathematics, 2019–present • Helped organize community-building events • Assisted at mathematics outreach events
<i>Graduate Student Advisory Committee</i> 2018–present	
University of Utah, Salt Lake City, UT	
<ul style="list-style-type: none"> • Retention, Promotion, Tenure and Hiring Committee, 2020–present 	
OUTREACH TALKS	<i>How to Win a Race If You're Not a Robot</i> January 2020
	Graduate Student Colloquium, University of Utah Salt Lake City, UT
	<i>If You Give a Random-Walking Mouse a Cookie</i> September 2019
	Graduate Student Colloquium, University of Utah Salt Lake City, UT

Life as a Graduate Student in Mathematics

July 2019

Professional Development Webinar for the Ohio Wesleyan University STEM REU

MEMBERSHIPS Association for Women in Mathematics (AWM), Society of Industrial and Applied Mathematics (SIAM), American Mathematical Society (AMS)