

Elizabeth Wesson

CONTACT INFORMATION	657 Rhodes Hall Center for Applied Mathematics Cornell University Ithaca, NY 14853 USA	(601) 347-3669 enw27@cornell.edu https://people.cam.cornell.edu/~enw27/
RESEARCH INTERESTS	Evolutionary game dynamics, nonlinear dynamics and bifurcations, delay differential equations, perturbation methods	
EDUCATION	Center for Applied Mathematics, Cornell University Ph.D. Candidate, Applied Mathematics, August 2010 - (current) <ul style="list-style-type: none">• Advisor: Richard Rand• Committee Members: Paul Steen, John Guckenheimer, Steven Strogatz• Minors in Mathematics and Theoretical & Applied Mechanics Swarthmore College B.A., Mathematics with Honors, Physics, August 2006 - May 2010 <ul style="list-style-type: none">• High Honors, Phi Beta Kappa (2010)	
PUBLICATIONS	<i>Hopf bifurcations and limit cycles in delayed two-strategy replicator dynamics</i> with Richard Rand in review (2014) <i>Hopf bifurcations and limit cycles in delayed Rock-Paper-Scissors replicator dynamics</i> with Richard Rand in review (2014) <i>Alternate models of replicator dynamics</i> with Richard Rand Journal of Applied Nonlinear Dynamics 2(2) pp 193-206 (2013) <i>Roundness properties of ultrametric spaces</i> with T. Faver, K. Kochalski, M. Murugan, H. Verheggen and A. Weston Glasgow Mathematical Journal 56 pp 519-535 (2014)	
CONFERENCE PRESENTATIONS	<i>Alternate models of replicator dynamics</i> 2013 May SIAM Snowbird Conference on Dynamical Systems 2013 August ASME International Design Engineering Technical Conferences <i>Hopf bifurcations in two-player delayed replicator dynamics</i> 2014 August ASME International Design Engineering Technical Conferences	
PAPERS IN PREPARATION	<i>A model of Rock-Paper-Scissors replicator dynamics with quasiperiodic forcing</i> with Richard Rand	

HONORS AND AWARDS	2013	SIAM student travel award
	2010	Cornell University graduate research fellowship
	2008-09	Swarthmore College summer research grants
	2006	Kelly Gene Cook, Sr. STAR Scholarship
GRADUATE COURSEWORK		<ul style="list-style-type: none"> • MAE 6750: Nonlinear Vibrations • TAM 6110: Methods of Applied Math II • Math 6220: Applied Functional Analysis • ChE 7530: Stability & Bifurcation • TAM 6130: Asymptotics and Perturbation • Math 7170: Applied Dynamical Systems • Math 6710: Probability Theory • Math 6310: Algebra • TAM 6720: Celestial Mechanics • TAM 5780: Nonlinear Dynamics and Chaos • Math 6180: Smooth Ergodic Theory • Math 6170: Dynamical Systems • Math 6110: Real Analysis • Math 4250: Numerical Analysis & Differential Equations
TEACHING	Fall 2014	GA, Math 3230: Introduction to Differential Equations Instructor: Richard Rand
	Spring 2014	TA, Math 2930: Differential Equations for Engineers Instructor: Robert Terrell
	Fall 2013	GA, Math 6170: Dynamical Systems Instructor: Yulij Ilyashenko GA, Math 2310: Linear Algebra with Applications Instructor: Farbod Shokrieh
	Fall 2012	GA, Math 4250: Numerical Analysis and Differential Equations Instructor: Alexander Vladimirovsky
	Summer 2012	TA, Summer Mathematics Institute (SMI) at Cornell: Covering systems project Instructor: Mark Kozek
	Spring 2012	TA, Math 2930: Differential Equations for Engineers Instructor: Alexander Vladimirovsky, Yuri Berest
	Fall 2011	GA, Math 1105: Finite Mathematics for the Life and Social Sciences Instructor: Mahdi Asgari
	Summer 2011	TA, SMI: Roundness and generalized roundness project Instructor: Anthony Weston
SERVICE	Fall 2012 - present	Treasurer, Center for Applied Math Graduate Student Club
	Fall 2012 - Spring 2013	Diversity Program in Mathematics: Mentoring
	October 2011	Johns Hopkins Center for Talented Youth Odyssey Series Instructor for one-day course on chaos
	April 2011	Expanding Your Horizons volunteer
COMPUTING LANGUAGES		Mathematica, MATLAB, FORTRAN, Python
REFERENCES		<p>Richard Rand Professor of Mathematics and Mechanical and Aerospace Engineering, Cornell University (607) 255-8198, (607) 255-7145, rhr2@cornell.edu</p> <p>Steven Strogatz Jacob Gould Schurman Professor of Applied Mathematics, Cornell University (607) 255-5999, shs7@cornell.edu</p> <p>Paul Steen Maxwell M. Upson Professor of Engineering, Cornell University (607) 255-4749, phs7@cornell.edu</p>