

Youngmin PARK

PERSONAL DATA

DATE OF BIRTH: 28 October 1988
CITIZENSHIP: USA
ADDRESS: 301 Thackeray Hall Pittsburgh, PA 15260
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EDUCATION

AUG. 2013 – MAY 2018 (Expected) PhD Mathematics, **University of Pittsburgh**
Advisor: Bard Ermentrout

SEP. 2016 Advanced Computational Neuroscience
Max Planck Institute for Dynamics and Self Organization
Göttingen, Germany

AUG. 2015 Methods in Computational Neuroscience
Marine Biological Laboratory, Woods Hole, MA

AUG. 2012 – AUG. 2013 MS Applied Math **Case Western**, Cleveland, OH
Thesis: Infinitesimal Phase Response Curves for Piecewise Smooth Dynamical Systems | Advisor: Peter J. Thomas

AUG. 2008 – AUG. 2013 BS Applied Math **Case Western**, Cleveland, OH

PUBLICATIONS

Park, Y., Ermentrout, G.B. "Limit Cycles and Chaos in a Neural Field Model with Spike Frequency Adaptation." (in preparation)

Park, Y., Shaw, K.M. Chiel, H.J. Thomas, P.J. "The Infinitesimal Phase Response Curve of Oscillators in Piecewise Smooth Dynamical Systems." Nonlinearity. (submitted)

Park, Y., Heitmann, S., Ermentrout, G.B. "The Utility of Phase Models in Studying Neural Synchronization." Wiley-Blackwell 2016. (Accepted for publication)

Park, Y., Ermentrout, G.B. "Weakly Coupled Oscillators in a Slowly Varying World." Springer Journal of Computational Neuroscience 40.3 (2016): 269-281.

Shaw, K.M., **Park, Y-M.**, Chiel, H.J., Thomas, P.J. "Phase Resetting in an Asymptotically Phaseless System: On the Phase Response of Limit Cycles Verging on a Heteroclinic Orbit." SIAM Journal on Applied Dynamical Systems 11.1 (2012): 350-91.

INVITED PRESENTATIONS

“Weakly Coupled Oscillators in a Slowly Varying World”. Oral presentation at SIAM Conference on Applications of Dynamical Systems, Snowbird, Utah, May 24, 2017.

“Weakly Coupled Oscillators in a Slowly Varying World”. Oral presentation at SIAM Conference on the Life Sciences, Boston, MA, July 13, 2016.

TEACHING

University of Pittsburgh

SUMMER 2017	Differential Equations (lecture, 14 students)
FALL 2016	Business Calculus (recitation x3, 20–24 students each)
SUMMER 2016	Differential Equations (lecture, 23 students)
SPRING 2016	Calculus 3 (recitation, 28 students)
FALL 2015	Calculus 1 and 2 (recitation, 25 students each)
SUMMER 2015	Matrices and Linear Algebra (lecture, 27 students)
SPRING 2015	Discrete Mathematical Structures (lecture, 33 students)
FALL 2014	Calculus 1 (recitation x3, 25 students each)
SUMMER 2014	Differential Equations (lecture, 9 students)
FALL 2013	Business Calculus (recitation, 23 students)

Oberlin College

WINTER 2013	Computational Neuroscience course assistant for Keith Downing
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HONORS AND AWARDS

2017-2018	Andrew Mellon Predoctoral Fellowship
2016	Elizabeth Baranger Teaching Award (nominated)

COMPUTER SKILLS

Web:	Drupal, HTML/CSS, PHP
Research:	MCell/DReAMM, R, NEURON, UNIX, Mathematica, XPP
Languages:	Python (Numpy, Scipy, Matplotlib), Perl, MATLAB