Stanley R. Huddy

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Employment History

2020 – present	**Associate Professor of Mathematics**, Fairleigh Dickinson University, Teaneck, NJ
2015 – 2020	Assistant Professor of Mathematics, Fairleigh Dickinson University, Teaneck, NJ
2013 – 2015	Lecturer of Mathematics, State University of New York at New Paltz, New Paltz, NY
2009 – 2013	Graduate Teaching Fellow, Department of Mathematics, Clarkson University, Potsdam, NY
2008 – 2009	Adjunct Professor, Sussex County Community College, Newton, NJ
2008 – 2009	Teacher of Mathematics, Passaic Valley High School, Little Falls, NJ
2005 – 2008	NSF GK-12 Teaching Fellow, Clarkson University, Potsdam, NY

Education

Ph.D.	Mathematics Clarkson University, Potsdam, NY (2013) Dissertation: The Effects of Coupling Delay on the Dynamics and Synchronization of Small Oscillator Networks Committee: Joseph D. Skufca, Erik Bollt, Jie Sun, Daniel ben-Avraham, Brian Helenbrook
M.S.	Mathematics Clarkson University, Potsdam, NY (2008)
B.S.	Mathematics (*cum laude, Member: Pi Mu Epsilon*) Montclair State University, Upper Montclair, NJ (2005)
A.A.	Liberal Arts (*Member: Phi Theta Kappa*) Sussex County Community College, Newton NJ (2003)

Certifications

Standard Certificate	Teacher of Mathematics Department of Education State Board Examiners, The State of New Jersey (2009)

Awards

- The George Pólya Award for articles of expository excellence published in The College Mathematics Journal.
  Awarded by the Mathematical Association of America for *The Calculus Behind Generic Drug Equivalence*.
  MathFest, Cincinnati, OH (July 2019)
- Student Travel Award
  Awarded by SIAM to attend the SIAM Conference on Applications of Dynamical Systems
  Snowbird, UT (May 2013)

Research

Publications (* = student author)

14. *The milk and Monge shuffles and three self-working card tricks*
    Stanley R. Huddy
    The Mathematical Gazette, (Accepted May 2024)
13. *Enumeration of the Positive Rational Numbers Using The Calkin-Wilf Tree with Application to the Game Euclid*
    Stanley R. Huddy & Brittany C. Ohlinger
    Teaching Mathematics Through Cross-Curricular Projects, Classroom Resource Materials Book Series
    Edited by E.A. Donovan, L.A. Hoots, and L.W. Wiglesworth, American Mathematical Society (2024)

12. *Using critical curves to compute master stability islands for amplitude death in networks of delay-coupled oscillators*
Stanley R. Huddy
Chaos, 30, 013118 (2020)
11. *You Only Need a Bit of Luck to Win MTV's Are You the One?*
Stanley R. Huddy and Nomin Sukhbaatar*
The UMAP Journal, 40.1 Spring Edition, p. 5-20 (2019)
10. *Math Bite: Hobbits and a Birthday-type Problem*
Stanley R. Huddy
Mathematics Magazine, Vol. 92, Num. 3, p. 200-200 (2019)
9. *Quotients of Hypotenuses of Pythagorean Triples* $(a, b, b+1)$ *and Finite Differences*
Stanley R. Huddy and Michael A. Jones
The Mathematical Gazette, Vol. 103, p. 132-135 (2019)
8. *All Parabolas Through Three Non-collinear Points*
Stanley R. Huddy and Michael A. Jones
The Mathematical Gazette, Vol. 102, No. 554, p. 203-209 (2018)
7. *The Calculus Behind Generic Drug Equivalence*
Stanley R. Huddy and Michael A. Jones
The College Mathematics Journal, Vol. 49, No. 1, p. 2-9 (2018)
6. *Real Mathematics Fact*
Stanley R. Huddy
Mathematics Magazine, Vol. 90, Num. 3 (2017)
5. *Master Stability Islands for Amplitude Death in Networks of Delay-Coupled Oscillators*
Stanley R. Huddy and Jie Sun
Physical Review E, Vol. 93, p. 052209 (2016)
4. *Proof without Words: Sums of Consecutive Odds and Positive Integer Cubes*
Stanley R. Huddy
Mathematics Magazine, Vol. 89, Num. 3, p. 196-196 (2016)
3. *A Geometric Perspective on Counting Nonnegative Integer Solutions and Combinatorial Identities*
Matthew J. Haines, Stanley R. Huddy, and Michael A. Jones
International Journal of Mathematical Education in Science and Technology, Vol. 46, p. 598-611 (2015)
2. *Amplitude Death Solutions for Stabilization of DC Microgrids with Instantaneous Constant-Power Loads*
Stanley R. Huddy and Jospeh D. Skufca
IEEE Transactions on Power Electronics, Vol. 28, p. 247-253 (2013)
1. *Redundancy in Nimber Sequences for Three-Element Subtraction Sets*
Stanley R. Huddy, Michael A. Jones, and Brittany C. Shelton
Pi Mu Epsilon Journal, Vol. 12, No. 7, p. 393-403 (2007)

Presentations

The Milk and Monge Shuffles and Three Self-Working Card Tricks

- MathFest, Indianapolis, IN (August 2024)
- Mathematics Department Colloquium, Albion College, Albion, MI (February 2024)

Using critical curves to compute master stability islands for amplitude death in networks of delay-coupled oscillators

- SIAM Conference on Applications of Dynamical Systems. Snowbird, UT (May 2019)

You Only Need a Bit of Luck to Win MTV's Are You the One?

- Recreational Mathematics Session Part B, MathFest, Cincinnati, OH (August 2019)
- Mathematics Seminar, William Patterson University, Wayne, NJ (October 2018)

Properties of Master Stability Islands for Amplitude Death in Networks of Delay-Coupled Oscillators

- 14th IFAC Workshop on Time Delay Systems, Budapest, Hungary (June 2018)

All Parabolas Through Three Non-collinear Points

- Northeastern Section of the MAA Spring 2017 Meeting, Northfield, VT (June 2017)

Master Stability Islands for Amplitude Death in Networks of Delay-Coupled Oscillators

- SIAM Conference on Applications of Dynamical Systems. Snowbird, UT (May 2017)
- Joint Mathematics Meetings, Seattle, WA (January 2016)

Coupled Nonlinear Systems with Applications to DC Microgrids
- GHCSE Seminar Series, Fairleigh Dickinson University, Teaneck, NJ (November 2016)
- Electrical and Computer Engineering Seminar, Union College, Schenectady, NY (February 2015)

The Effects of Coupling Delay on the Dynamics and Synchronization of Coupled Nonlinear Systems
- Arts and Sciences Seminar Series, Clarkson University, Potsdam, NY (November 2015)

An Introduction to Chaos Theory
- Mathematical Science Seminar, Montclair State University, Upper Montclair, NJ (October 2015)

Master Stability Functions for Synchronized Identical Systems with Linear-Delay Coupling
- MathFest, Washington, DC (August 2015)

Butterflies and Chaos
- Mathematics Department Colloquium, Albright College, Reading, PA (April 2015)
- Mathematics Department Colloquium, SUNY New Paltz, New Paltz, NY (February 2014)

Complete Synchronization on Networks of Identical Oscillators with Diffusive Delay-Coupling
- MathFest, Portland, OR (August 2014)
- MAA Metro NY Sectional Meeting, Garden City, NY (May 2014)

Chaos, Synchronization, and Delay
- MAA Seaway Sectional Meeting, Potsdam, NY (October 2013)
- Mathematics Department Colloquium, Albion College, Albion, MI (April 2013)

Amplitude Death Solutions for Stabilization of DC Microgrids with Instantaneous Constant-Power Loads
- SIAM Conference on Applications of Dynamical Systems, Snowbird, UT (May 2013)
- Joint Mathematics Meetings, San Diego, CA (January 2013)

Teaching STEM Concepts Using Khan Academy, MATHCOUNTS, and Roller Coasters
- CSTEM Academy Workshop, Clarkson University, Potsdam, NY (August 2012)

Stabilizing Electronic Circuits via Coupling
- 2nd Annual New York State Applied Mathematics Conference, Buffalo, NY (April 2011)

Redundancy for NIM Under $S = \{a, b, c\}$
- Annual Sigma Xi Student Research Conference, Upper Montclair, NJ (May 2005)

Research Mentoring Accomplishments

- Nomin Sukhbaatar
  Project: *You Only Need a Bit of Luck to Win MTV's Are You the One?*
  Awards: Outstanding Talk Award, 2018 Garden State Undergraduate Mathematics Competition (April 2018)
  Publications: UMAP Journal (2019)

SERVICE

Editorial Board Member

- Mathematics Magazine, Mathematical Association of America (2020 – present)

Conferences

- Session Chair: *Networks and Synchronization*
  SIAM Conference on Applications of Dynamical Systems, Snowbird, UT (May 2019)
- Mini-symposium Co-Organizer: *Delay and Stability of Complex Network Dynamics*
  SIAM Conference on Applications of Dynamical Systems, Snowbird, UT (May 2017)
- Session Chair: *Control and System Dynamics*
  SIAM Conference on Applications of Dynamical Systems, Snowbird, UT (May 2013)

- Graduate Student Assistant: *Mythical Scientists and Imaginary Mathematicians Workshop*
  New York State STEP Conference, Albany, NY (March 2011)
- Graduate Student Assistant: *Zombies, Gossip, and Math: On Mathematical Modeling Workshop*
  New York State STEP Conference, Albany, NY (March 2010)

Reviewer

- Mathematics Magazine
- The American Mathematical Monthly
- International Journal of Bifurcation and Chaos

Book Reviews

- *Coordinate Systems for Games: Simplifying the "me" and "we" Interactions*
  by D. Jessie & D Saari, Mathematical Reviews (March 2021)
- *Disequilibrium Economics* by Tönu Puu, Mathematical Reviews (January 2019)
- *Modeling Love Dynamics* by Sergio Rinaldi et al., Mathematical Reviews (January 2017)
- *Computational Neuroscience; A First Course* by Hanspeter A. Mallot, Mathematical Reviews (March 2015)
- *How to Think About Analysis* by Lara Alcock, MAA book Reviews (January 2015)
- *Dynamical Systems with Applications using MATLAB* by Stephen Lynch, MAA Book Reviews (November 2014)

Judge/Grader

- MAA Student Paper Sessions, MathFest, Cincinnati, OH (August 2019)
- SIAM Mathwork's Mega Math Challenge (March 2018 & 2020)
- SIAM Moody's Mega Math Challenge (March 2014, 2015, 2016, & 2017)
- SIAM Integration Bee Competition, SUNY New Paltz (Fall 2013, Spring 2014, & Fall 2014)
- First LEGO League Climate Connections Challenge, Clarkson University (October 2009)

Professional Memberships

- Mathematical Association of America (MAA) (2013–present)

References

Joseph D. Skufca	Professor and Chair Department of Mathematics Clarkson University Potsdam, NY 13699	(315) 268-2399 jskufca@clarkson.edu
Kathleen R. Kavanagh	Professor Department of Mathematics Clarkson University Potsdam, NY 13699	(315) 268-2376 kfowler@clarkson.edu
Michael A. Jones	Associate Editor AMS Mathematical Reviews 416 Fourth Street Ann Arbor, MI 48103	(734) 995-3881 maj@ams.org
David P. Wick	Assistant Vice President for Research and Student Success Rochester Institute of Technology 138 Lomb Memorial Drive Rochester, NY 14623	(585) 475-4296 dpwmcs@rit.edu