# 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)

- 15. Redistributing Votes when Candidates Drop Out of an Election Stanley R. Huddy, Michael A. Jones & Jennifer M. Wilson The Mathematics Enthusiast, (Accepted 2025)
- 14. The milk and Monge shuffles and three self-working card tricks Stanley R. Huddy
  The Mathematical Gazette, (Accepted 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 (315) 268-2399

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Clarkson University Potsdam, NY 13699

Kathleen R. Kavanagh Professor (315) 268-2376

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