

MARK R. SNAVELY

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EDUCATION

Northwestern University, Evanston, IL: Ph.D. in mathematics, 1990. Thesis title: *Markov Partitions for Hyperbolic Automorphisms of the Two-Dimensional Torus*. Advisor: John M. Franks.

Northwestern University, Evanston, IL: M. A. in mathematics, 1987.

Grove City College, Grove City, PA: B. S. in mathematics and computer systems, *summa cum laude*, 1985. Received the P. N. Carpenter Outstanding Senior Mathematics Award.

PROFESSIONAL EXPERIENCE

Carthage College, Kenosha, WI: Professor of Mathematics, 2003-present, Chair of the Mathematics Department, 1995-2022, Associate Professor of Mathematics, 1995-2003. Assistant Professor of Mathematics, 1990-1995. Named Carthage College 2003-2004 Distinguished Teacher of the Year.

Committee work overview: Academic Program Review Committee (Summer 2020), Academic Senate, (three-year term, currently serving second three-year term), Writing Across the Curriculum Committee (multiple three-year terms, several terms as chair), Institutional Effectiveness Committee, Curriculum Planning Committee (six years service, six years as secretary), Faculty Executive Committee (six years service, one year as chair, two years as vice-chair, one year as secretary), Personnel and Tenure Committee (seven years service, three years as chair, one as secretary). Numerous tenure-track faculty or administrative search committees including Dean of the College and Athletic Director. Steering Committee for North Central Accreditation Review, 2003-2004.

Undergraduate research: Advised hundreds of student papers, numerous presentations at undergraduate research conferences, one Carthage Research and Creativity Award winner, and two Carthage Research and Creativity Award runners-up. The paper by Patty Geroulis, *Volleyball: The Effects of Spin on the Serve*, was published in **The Pentagon** 54 (1995), 32-38.

General Education: Coordinator (1994-2004) and developer of Discovery, Carthage's natural science general education curriculum. Discovery was highlighted in **The Scientist**, November 13, 1995. Taught in Discovery, Heritage (all-college general education), and Applied Mathematics (mathematics general education).

Oakton Community College, Des Plaines, IL: Ad hoc Instructor of Mathematics and Computer Science, Summer 1990.

PUBLICATIONS

Snavely, Mark R., Woodruff, Phil. (2022) *"The Solution of a Problem of Searching for Three Numbers, of Which the Sum, Product, and the Sum of Their Products Taken Two at a Time, Are Square Numbers,"* Euleriana: 2(1), p. 27, Article 5. DOI: <https://doi.org/10.56031/2693-9908.1020>; Available at: <https://scholarlycommons.pacific.edu/euleriana/vol2/iss1/5>.

Snively, Mark R., Woodruff, Phil. *On three square numbers, of which the sum and the sum of products two apiece will be a square (De Tribus Numeris Quadratis, quorum tam summa, quam summa productorum ex binis sit quadratum)*, Translation from Latin into English. Available since 2014 online as E523 at www.eulerarchive.org.

Snively, Mark R., Woodruff, Phil. *Proof of Fermat's Theorem That Every Prime Number of the Form $4n + 1$ is the Sum of Two Squares (Demonstratio theorematis Fermatiani omnem numerum primum formae $4n + 1$ esse summam duorum quadratorum)* Translation from Latin into English. Available since 2012 online as E241 at www.eulerarchive.org.

Beaman, James D., Beyerstedt, Erin J., Snively, Mark R. *Counting Train Track Layouts*, Math. Mag. **79** (2006), no 5, 347-359. This article was featured in MathTrek, Science News, Week of Jan. 6, 2007; **Vol. 171, No. 1**, and *muse*, Jan. 2008; **Vol. 12, No. 1**.

Snively, Mark R. *The Scientific Process of Discovery, The Basic Stuff of the Universe, Chaos Theory and Weather Prediction, Population Dynamics, Newtonian Physics, The Special Theory of Relativity, and The General Theory of Relativity in Natural Science 150-Discovery*, Wm C. Brown Publishers, Dubuque, Iowa, 1996.

Snively, Mark R. *Markov Partitions for the Two-Dimensional Torus*, Proc. Amer. Math. Soc. **113** (1991), 517-527.

PRESENTATIONS AND PANELS

Snively, Mark R. *A Counting Problem Involving Splitting Pills*, MAA Wisconsin Section Meeting, Whitewater, Wisconsin, 2024

Snively, Mark R. *Panel Session: How to Apply for Jobs in Academia and Industry after your PhD*, Invited panelist at MAA MathFest, Columbus, OH, 2016.

Snively, Mark R. *Even Euler Dropped Minus Signs (But We Can See Why)*, MAA Wisconsin Section Meeting, Ripon College, 2015

Snively, Mark R. *One Way to Run an Actuarial Science Course*, MAA Wisconsin Section Meeting, UW Marshfield, 2013.

Snively, Mark R. *Euler's paper "Proof of Fermat's Theorem that Every Prime Number of the Form $4n + 1$ is the Sum of Two Squares"*, Euler Society Meeting, Kenosha, WI, 2011.

Snively, Mark R. *A Variation on the Birthday Problem*, MAA Wisconsin Section Meeting, Oshkosh, WI, 2010.

Snively, Mark R. *Counting Train Track Layouts*, MAA Wisconsin Section Meeting, West Bend, WI, 2005.

Snively, Mark R. *Panel Discussion: Undergraduate Research in Mathematics: All you Want to Know*, MAA Wisconsin Section Meeting, Platteville, WI, 2004.

Snively, Mark R. *Induction Without Using Induction*, MAA Wisconsin Section Meeting, Ripon, WI, 2002.

Snively, Mark R. *Factoring Integer Matrices*, MAA Wisconsin Section Meeting, De Pere, WI, 2001.

Snively, Mark R. *Tigers Stripes and Moving Centroids: Novel Applications of Calculus*, MAA Wisconsin Section Meeting, Superior, WI, 2000.

Snively, Mark R. *SEIR Models for the Spread of Disease*, Beliot College Mathematics Seminar, Beliot, WI, 1998.

Snively, Mark R. *Mathematics and Science General Education*, Refereed session of the Joint Meetings of the Mathematical Societies, Baltimore, MD, 1998.

Snively, Mark R. *The Function Diagram: A Tool for Teaching Calculus*, MAA Wisconsin Section Meeting, Platteville, WI, 1996.

Snively, Mark R., Edward R. Rang *Applications and Their Differential Equations*, MAA Wisconsin Section Meeting, Green Bay, WI, 1995.

Snively, Mark R. *Panel Discussion: Teaching Using Technology*, MAA Wisconsin Section Meeting, Green Bay, WI, 1995.

Snively, Mark R. *The Hazards and Joys of Undergraduate Research*, MAA Wisconsin Section Meeting, Eau Claire, WI, 1994.

Snively, Mark R., Brawner, Thomas A. *DISCOVERY: A Science Course for Non-Science Majors at Carthage College*, General and Liberal Education: Inside Out/Outside In (refereed), Association for General and Liberal Studies, Savannah, GA, 1994,

Snively, Mark R. *An Introduction to Symbolic Dynamics*, MAA Wisconsin Section Meeting, Menasha, WI, 1993.

Snively, Mark R. *Markov Partitions for the Two-Torus*, MAA Wisconsin Section Meeting, La Crosse, WI, 1992.

Snively, Mark R. *Markov Partitions with Two Rectangles on the Two-Torus*, invited participant and speaker and the Conference for Ergodic Theory and Symbolic Dynamics at the University of Washington, Seattle, Washington, 1989.

PROFESSIONAL ACTIVITIES

Professional Organizations and Honoraries: **MAA** - Member for 40 years. Received Certificate of Meritorious Service in 2018. Member of Committee on Graduate Students 2015-2018. Wisconsin Section Offices Held: Governor (2014-2017) Chair-Elect, Chair, Immediate Past Chair, Secretary/Treasurer (six years). Also a member of the **American Mathematical Society**, **Pi Mu Epsilon**, **Kappa Mu Epsilon**, and a full member of **Sigma Xi**.

Graduate Student Advisor: Masters of Education, Jamie Marie Schend. Title of thesis: *The Effects of Block Scheduling on Mathematics Instruction*, Carthage College, 1999.

Referee/Reviewer: Reviewer for Adrian College Mathematics Department's Self-Study, 2016. Evaluated grant proposal for the U.S. Civilian Research and Development Foundation (CRDF), 2004. Critical review as referee for Mich. J. Math. 1998.

Outside Interests: Ordained Elder, Presbyterian Church (USA); Wildwood Presbyterian Church: Clerk of Session 2015-2021, webmaster, member of church choir, and brass ensemble member; Warren Township Youth Baseball: Manager and Assistant Coach, 2005-2016; Gurnee Youth Baseball: Coach, 2013-2020. Cub Scout Pack 672: Treasurer (2010-2012), Eagle Scout.