



Wisconsin Section  
Mathematical Association of America

NEWSLETTER

Fall 2023

Representative's Report

By James Swenson, UW-Platteville

Thanks very much for allowing me to serve as your representative to the MAA



Congress! It's a pleasure to learn more about how the organization operates, and to help share information back and forth between the MAA's members and its administrators. I'd like to acknowledge the excellent work done by Tom Drucker, who held this role before me: I will strive to live up to his example.

It was Tom who suggested something new for last year's annual meeting: prizes for the top student talks. That's going to happen again this year, and I hope that it will encourage more students to attend and to contribute talks. Feel free to spread the word!

Last year, the MAA stopped participating in the management of the Joint Mathematics Meetings. This has created an opportunity to focus more energy on the sections. Going forward, we can count on the MAA to support at least two Section Lecturers to attend our annual meeting, in addition to the regular rotation of Polya Lecturers. This is helping the Section out financially, and it's bringing a little extra activity to our spring get-together.

Internally, the MAA is excited to be implementing a new membership management system, which may

lead to a smoother experience for members. Work is well underway on a new strategic plan for the organization, too, and we'll be hearing more about that in the near future. We can also look forward to the MAA's impact report, celebrating the ongoing contribution that the MAA's activities make to A new journal called *Scatterplot*, with a focus on data science, will join the MAA's array of excellent periodicals in 2024. I'm excited to see it, and glad that the MAA is able to offer a forum for new work in this very active field.

Once again, I'm honored to be working for you, and I take seriously my responsibility to represent you in the MAA Congress. I look forward to hearing your ideas!

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Save the Date!

The Spring Meeting of the MAA Wisconsin Section will be held April 12-13, 2024 on the campus of UW-Whitewater. Mark your calendars!

## Chair's Report

By Petre "Nelu" Ghenciu, UW-Stout

**T**he 90th MAA Wisconsin Section meeting was held, finally, after a long 3 years of virtual meetings, at UW-Stout, on April 28-29, 2023. It was a great opportunity to celebrate mathematics in the beautiful state of Wisconsin. We had two days of great presentations, conversations, exchange of ideas, and rooms almost always full of participants. But the highlight of the meeting was definitely seeing all the students presenting and attending and asking carefully considered questions with the joy and curiosity that only happens when you are in college. I am sure the future of MAA WI is in great hands.



We had two guests, who gave three very entertaining and engaging presentations. Dr **Tom Edgar**, Professor at Pacific Lutheran University and editor of Math Horizons, spoke about "seeking balance in mathematics" on Thursday afternoon and **Adriana Salerno**, Professor of Mathematics at Bates College and our MAA section visitor told us on Thursday evening about "the stories we tell". We cannot forget, big thanks to **Steve Szydlik** and **Ben Collins**, about the return of "Face Off", our very popular student content that happened right before the social event on Thursday evening. For me, the highlight of the evening was the recognition of **Kristen Lampe** from Carroll University and **Sherry Serros** from Mount Mary University as 2023 Wisconsin Section Distinguished Teachers.

On Friday morning Tom Edgar told us about how to publish in MAA periodicals and we ended the meeting with a great panel discussion put together by our Project NExT team. We also celebrated our students participants at the meeting by awarding our first ever student presentations awards that also came with a check.

And last but not least, a very big thanks to the team of faculty, staff, and students from UW-Stout that help make the 90<sup>th</sup> MAA WI meeting a resounding success and a hard to forget event.

The 2024 Spring Meeting will be held at UW-Whitewater on April 12-13 2024. Chair-elect Dr. **Holly Attenborough**, UW-Platteville, working with **Wesley Hough** from UW-Whitewater, will lead the planning of the event. We have three invited speakers confirmed and scheduled: **Candice Price** will be our NAM speaker, her talk will be given on Friday afternoon, **Kristi Lampe** will be our teaching award speaker and her talk will be Friday evening, and **Edray Goins** will be our MAA section visitor and his talk will be on Saturday morning. Please encourage people at your local campuses to attend. I set a goal of 200+ mathematicians attending in 2023 at UW-Stout and we had about 100 people attending. Please help us achieve the 200+ participants goal this time around!

We would much appreciate if you considered serving in a position on the Executive Committee of the MAA-WI section. This is the place to bring new ideas, new expertise, and make a big lasting impact on the future of MAA-WI.

I look forward seeing all of you at UW-Whitewater. It pains me to say this, as I was closely involved with organizing the 2023 meeting at UW-Stout, but from what I hear and knowing the people involved with the planning it will be an even better event than the one last year. So, in closing, if you are looking for a place this coming spring 2024 to spend two days in the company of a fun group of fellow mathematicians or mathematicians to-be, look no further... UW-Whitewater is the place to be!

### Website

The Section's website has moved to  
<https://wisconsin.maa.org>

Archives of Section documents may be found in the  
 Section's [MAA Connect](#) Community Library.

## Contests Report

by Gabriella Pinter, UW-Milwaukee

<https://www.wisconsin.maa.org/contests>

### American Mathematics Competitions

The AMC competitions were offered in-person only in the 2022-2023 academic year. AMC 10/12 A and B took place in November 2022 while the AMC 8 was in January 2023. The MAA AMC Historical Statistics page does not list any data for competitions in 2022-2023, thus there is no information on how Wisconsin students performed this year.



Overall, 159,000 (119,000 US+ 40,000 International) students participated in the AMC 10/12 and 139,000 (98,000 US + 41,000 International) in the AMC 8. This is a significant increase from the previous year.

### MAA-Wisconsin Section High School Contest Examination

Preparations for the Wisconsin High School contest are proceeding on schedule. The contest will be held in December. Our new host institution is the University of Wisconsin-Whitewater with Dr **Dylan Spence** overseeing the production of the contest. We thank Dr **Kevin Haertzen** and the University of Wisconsin-Platteville for administering the competition in the last five years.

## Section NExT-Wisconsin Report

by Niles Armstrong,

Milwaukee School of Engineering

<https://www.wisconsin.maa.org/section-next-wi>

### 2023 Spring Panel

The Spring 2023 panel discussion was conducted during the MAA-WI spring sectional meeting on Saturday, April 29, 2023. The overarching theme of this panel was "Bridging the Gap and Increasing Understanding Between Higher Education and K-12 Mathematics Education." The panelists included **David Berger** and **Michelle Dupree** from the Menomonie School District, **Erick Hofacker** from UW-River Falls, **Grey Hush** from Baldwin High School, and **Sherrie Serros** from Mt. Mary University.



Erick Hofacker took on the role of facilitating the panel discussion. This forum provided the panelists with a platform to delve into a range of pertinent topics. These topics encompassed Ideas for Teaching Precalculus and Calculus, Addressing Learning Loss from the Pandemic, and Pedagogical Concepts and Strategies. Notably, the discussion also featured an interactive

Q&A session, where the panelists fielded questions from the audience. The audience itself comprised a diverse mix of Section NExT and non-section NExT members, numbering over 15 attendees.

Section NExT extends its heartfelt appreciation to Erick Hofacker for his instrumental role in organizing and facilitating this insightful panel discussion. We eagerly anticipate the continuation of this annual tradition with an in-person panel discussion during the spring 2024 MAA-WI sectional meeting.

### 2023 Fall Conference

The Section NExT – Wisconsin's annual fall conference is tentatively scheduled to return to an in-person format for the first time since the pandemic. The event will be hosted at UW-Platteville Baraboo Sauk County in December 2023. We are delighted to announce that **Holly Attenborough**, from UW-Platteville University, will serve as our esteemed keynote speaker.

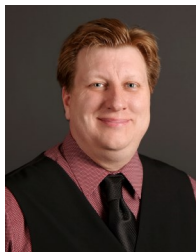
The conference is planned to span one and a half days, concluding with a member discussion for the active Section NExT members. During this discussion, we aim to gauge interest among our members re-

garding potential candidates for the next Section NExT director and gather input on the themes and topics for the 2024 spring panel. Section NExT members can anticipate receiving more detailed information about the conference very soon. This will in-

## Wisconsin Math Council Representative's Report

*By Erick Hofacker, UW-River Falls*

**A**fter a year of preparation, I'm pleased to announce a new co-promoted project by two of our state mathematics organizations, the Wisconsin Mathematics Council (WMC) and the Wisconsin Mathematical Association of America (MAA). The name of the project is the Mathematics Bridge Project (MBP) and the official launch date for the first event is November 15<sup>th</sup>. This project was created to bring members of both organizations together to share the great work that each of them are doing related to PK-16 mathematics and mathematics education in our state.



Each event will feature two speakers, one representing MAA and the other representing WMC, speaking on a similar topic or theme. The MAA speaker will focus on sharing their work related to an area of mathematics they are currently focused on or conducting research on themselves, or with undergraduate students. The WMC speaker will share their current focus or research related to a topic in the mathematics classroom or in mathematics education. The idea is bringing together speakers and audiences from both organizations to better learn from each other.

During our first event in November, we will have speakers representing each organization that will focus on data science and statistics. Future speakers will focus on the topics of Geometry, Mathematical Modeling, Assessment, and Algebra. All events will

include a comprehensive outline of the conference's agenda and logistics, to help facilitate participation and make the event a success.

be held on the third Wednesday of each month, with subsequent events held in 2024 during the months of January to April. All events will be held on Zoom from 4:00 – 5:00 p.m. Watch for future MAA and/or WMC emails and social media postings for more details and the zoom link. The Zoom link is <https://tinyurl.com/MAAWMCMBP>.

In addition to the Mathematics Bridge Project, we have also been focused in WMC this year on growing mathematics education clubs on campuses across Wisconsin. Currently we have three WMC affiliated clubs at: University of Wisconsin – River Falls, University of Wisconsin – La Crosse, and Concordia University. We are hoping to grow this number within the next year. As a show of synergy across the campuses, we are conducting a joint club event on Tuesday November 7<sup>th</sup>, from 6:30 – 7:30 p.m. on Zoom. The event will include a math activity that club members can participate in, as well as hosting guest speaker Lisa Hennessey, current president of WMC. Lisa will speak on her work as president of the organization, what WMC does as an organization, and encourage student members to become actively involved. She will also share her experience working as a math coach. The student clubs will have the opportunity to ask her questions about these as well as other topics. If you have students that you think might be interested, or if you feel this could help encourage the creation of a mathematics education club at your college, we would love to have you be a part of this. If you would like more information on either the MBP events or the Mathematics Education Student club event, please contact me at: [Erick.B.Hofacker@uwrf.edu](mailto:Erick.B.Hofacker@uwrf.edu)

## Announcements

### Pi Mu Epsilon Annual Regional Undergraduate Math Conference

St Norbert College is hosting the 37th annual Pi Mu Epsilon regional undergraduate conference on November 10 & 11. We are excited to announce past MAA President Dr. **Jenny Quinn** as our invited speaker as well as the return of Face Off! hosted by UW-Oshkosh faculty. Faculty and students are welcome to attend. Students who have done research, class projects, or independent studies in math, statistics, data or adjacent fields are encouraged to register as a speaker for a 15 minute talk. The conference is free and details can be found at <https://sncpme.knight.domains/>. Advanced registration (prior to Nov 1) is appreciated.

### Volunteers Needed

*The Section is looking for volunteers to fill the following positions on the Executive Committee. Send nominations or questions to the current Chair Nelu Ghenciu at ([ghenciup@uwstout.edu](mailto:ghenciup@uwstout.edu)). Section officers must be members of the MAA. For more information on the duties of the MAA-Wisconsin Executive Committee, see <https://www.wisconsin.maa.org/governance>*

#### Chair-Elect

The Section continually seeks nominations for Chair-Elect. This is a three-year, elected position. The Chair-Elect organizes the spring meeting. The following year, the Chair-Elect becomes Chair, and presides at each meeting of the Section and of the Executive Committee of the Section, as well as appointing committees and Executive Committee members as needed. The final year, the Chair becomes Immediate Past Chair, continues to sit on the Executive Committee, and oversees the selection of the Distinguished Teaching award recipient.

#### Secretary-Treasurer

The Section is seeking a new Secretary-Treasurer. The combined position is responsible for keeping the minutes of the official meetings, maintaining the records of the Section, and managing the financial matters of the Section. This is a three-year position.

#### Student Activities Coordinator

The Section is seeking a new Student Activities Coordinator. The Coordinator is responsible for Section activities directed toward the student members of the Wisconsin Section of the MAA, including finding and implementing appropriate activities for students at the annual section meeting as well as possible year-round activities.

### Distinguished Teaching Award

Nominations for the **Wisconsin Section Distinguished Teaching Award** are now being accepted. The deadline for consideration for this year's award is **March 14th, 2024**. The nomination form and instructions are available on the MAA-Wisconsin web site at <https://www.wisconsin.maa.org/awards>. If you have any questions, contact the immediate past chair Chunping Xie at [xie@msoe.edu](mailto:xie@msoe.edu).

## Know Your Wisconsin Mathematician

### Kseniya Fuhrman

#### Milwaukee School of Engineering

*Interviewed by Anthony van Groningen*

#### ***When did you decide that mathematics was what you wanted to do with your life?***

I grew up in Russia and came to the United States as a foreign exchange student during my last year of high school. Math was always my favorite subject growing up. It was my childhood hobby as I competed in math Olympiads and studied the subject outside of school curriculum. However, I had a hard time picturing what job a mathematician could have, so I started college majoring in Management Computer Systems, a major that combined Computer Science and Business. I was minoring in Mathematics. I did several internships in industry and understood that I have a greater passion to work in academia. In a hurry, I declared math as my second major during my senior year of college and started applying for graduate schools.

#### ***Where did you go to undergraduate school? What about graduate school? How did you end up at MSOE?***

I attended UW-Whitewater for my undergraduate degree and UW-Milwaukee for PhD. I am a University of Wisconsin product!

I love Milwaukee and wanted to stay in the area after graduate school.

#### ***What impact do you think UWM's graduate program has had on math education in Wisconsin?***

UW-Milwaukee is an excellent choice for students wanting to pursue an academic career that is more focused on teaching. During my graduate education I was fortunate to be a sole instructor for a variety

of courses which prepared me very well for my career at MSOE. Under the guidance of course coordinators who were not only experts in their research fields, but also passionate educators, I learned the value of thoughtful and meaningful assessment. Many of the members of MAA WI Section are UW-Milwaukee alumni, many of them are recognized for their teaching excellence at their institutions and are recipients of various teaching awards. It always fun to reconnect with them at the section meetings; even if we did not overlap in graduate school, we find a nice common bond.

#### ***Are there any teachers who had influenced you to become a mathematician?***

Dr Mohammad Ahmadi was my Calculus III and Number Theory professor at UW-Whitewater, he was the first to encourage me to pursue graduate school in math. I had many inspirational professors at UW-Whitewater and UW-Milwaukee. I am happy to see many of them at the section meetings and am fortunate to have served with some of them on the MAA executive board.

#### ***What have your students meant to you as a teacher and mathematician?***

Students is why I do what I do. They make me grow, they make me think, they make me laugh. I get inspired by their stories and like to keep in contact with many of my former students. I feel extremely blessed to have the job that I have.

***What courses do you like to teach?***

I love teaching any math course that is filled with freshmen in their first semester at MSOE. There is nothing like a room of freshmen, who are scared, don't know what to expect, but are willing to learn and work hard! I

love seeing their confidence build throughout the semester and watching them understand math on a deeper level. I also really enjoy teaching Linear Algebra as it is the first time for many students to be introduced to a more conceptual, abstract thinking and reasoning. However, the most memorable classes that I have taught are the ones where we were able to create a community of friends, willing to speak up, challenge each other, and make mistakes in front of each other. The classes that "buzz" the whole lecture are the ones that I enjoyed teaching the most, no matter what the subject was.

***How have you found that teaching of mathematics has changed over the years?***

I can answer this question for me personally. When I began teaching, my lectures started with definitions, followed by theorems/results, then proof/justification of the theorems, and later examples. I now follow a completely different format; I start with motivating examples, then introduce the concept and explain how it works. If there are proofs involved, we usually do them in the end, only after

the students are very comfortable with the concepts discussed.

*... try to build a classroom community. When students are connected with one another, they will be more connected to their learning.*

***How have you been you involved with the MAA? (What has this experience meant to you?)***

I've been involved in MAA since graduate school. In the early years of my career, I was part of the

Section NExT, which helped me network and get to know many of my colleagues in other institutions. I recently served as the section chair.

***What is your advice to new teachers?***

My advice for new teachers is to try to build a classroom community. When students are connected with one another, they will be more connected to their learning. I build in ways for students to get to know each other from early on in the semester. It is exciting for me to see students talk to one another before class instead of staring at their phones. Learning is best when they want to be there and having personal connections with their classmates creates a supportive environment where students feel comfortable expressing themselves, asking questions, and making mistakes without fear of judgment.

**Do You KYWM?**

*Do you know a Wisconsin mathematician that we should interview for an upcoming newsletter? Help support us in documenting the lives of impactful regional mathematicians by contacting the PIO at [vangroningen@msoe.edu](mailto:vangroningen@msoe.edu).*

# Campus News

## Beloit College

By Ben Stucky

**Sohaib Kiani** joined the Math and Computer Science department. He received his Master of Science in Electrical Engineering and Information Technology from RWTH Aachen University and his PhD in Computer Science from the University of Kansas.

**Katherine Harris** published the following article: Harris, Katherine, Jonathan D. Hauenstein, and Agnes Szanto. [Smooth Points on Semi-algebraic Sets](#). Journal of Symbolic Computation, Volume 116, May-June 2023, pp 183-212.

**Tom Stojsavljevic** published the following article: Stojsavljevic, T.; Guo, Y.; Macaluso, D. [Adaptive Stimulations in a Biophysical Network Model of Parkinson's Disease](#). Int. J. Mol. Sci. 2023, 24, 5555.

## Carroll University

By Kristen Lampe

**Kristen Lampe** and **Kim White** published an article, "The Effects of Online Mathematics Homework on Learning, Attitude, and Efficacy in a College Calculus Class - A Case Study" in PRIMUS July 2023.

## Milwaukee School of Engineering

By Anthony van Groningen

We welcomed three new faculty members to our growing department:

**Laura Buch** has joined us as an Instructor. She has a Masters in Mathematics from Minnesota State University. Prior to coming to MSOE, Laura taught at Minnesota State University - Mankato, Bethany Lutheran College, and Wisconsin Lutheran College. Most recently, she was employed as a Statistics Product Specialist with Hawkes Learning.

**Uddhaba Pandey** has joined us as an Instructor. He has a PhD in Applied Mathematics from Oklahoma State University. He has broad interest in fluid dynamics, but his focus lies primarily in studying nonlinear equations and their applications to various physical systems. He is particularly interested in exploring the existence, uniqueness

and stability of the Euler, Navier-Stokes, Boussinesq and Magnetohydrodynamics equations.

**Jinkai Xu** has joined us as an Assistant Professor. He has a PhD in Actuarial Science from the University of Connecticut and a masters in statistics from the University of Illinois at Urbana-Champaign. He is a Fellow of the Society of Actuaries (SOA) and teaches in our Actuarial Science program. His areas of interest include teaching courses to prepare students for the SOA exams (probability, financial mathematics, fundamentals of actuarial mathematics, statistics for risk modeling, predictive analytics and QFI track exams), as well as data-mining courses and fundamental mathematics courses.

**Cory Wright** gave a talk title "[Nonlocal Trace Spaces and Extension Results for Nonlocal Calculus](#)" at the AMS Fall Central Sectional Meeting in the Special Session on Recent Developments in Theories and Computation of Nonlocal Models.

## University of Wisconsin-Eau Claire

By aBa Mbirika

### Barron County Campus

The UW-Eau Claire – Barron County Math Team excelled in the annual student math league competition sponsored by the American Mathematical Association of Two-Year Colleges. They achieved 2nd place in the Midwest and 3rd in the nation! **Jiabei Lyu** emerged as the Midwest region's top individual scorer, clinching the 2nd position nationally. **Shuyu Liu** earned the 3rd position in the Midwest region and an impressive 8th place nationally. ([Link to results.](#))

A team of UW-Eau Claire – Barron County students—**Emily Ma, Mingxuan Bi, Autumn Kargus, Nyla Mayberry**—advised by **Dr. Wufeng Tian**, participated in MinneAnalytics 2023. They secured an impressive 3rd place in the Novice Division. ([Link to presentation slides.](#))

UW-Eau Claire – Barron County students **Xinyue Wang** and **Yue Hu** presented their faculty-student collaborative project, supervised by **Dr. Wufeng Tian**, titled 'Cryptocurrency Trading Strategies based on Market Signals and Deep Learning Approach.' The presentation took place at the National Conference on Undergraduate Research (NCUR) 2023 in April at the University of Wisconsin-Eau Claire. ([Link to presentation slides.](#))



## Eau Claire Campus

In Fall 2023, the department welcomed three new faculty members and one new staff member. Information on each new member is below.

**Terri Thill**, a new face in the Mathematics Office, comes to us after working nearly 5 years in the Admissions Department at UWEC. She writes the following: "It has been a wonderful transition to the Math Department. Interacting with students is my favorite part of work. Their ideas, character, and drive to be better humans is contagious and admirable. Much of my time outside the office is spent with my three dogs. We work as therapy teams visiting local hospitals, school functions, and hospice patients and their families providing affection comfort and support. My dogs and I have a quality human-animal bond which can be seen in the visits we do and the lives we touch."

**Chloe Lewis** joins the mathematics department as an assistant professor. Most recently, she was at Michigan State University where she completed her Ph.D. in algebraic topology and her M.S. in mathematics education. In her free time, Chloe enjoys baking and cooking, and does the NYT crossword everyday with her friend Christopher.

**Man Wing Chan** joins the mathematics department as a lecturer. She was previously an instructional designer at triOS College in Canada. She received her master's degree in applied mathematics from Western Michigan University.

**Aiham Hassan** joins the mathematics department as a visiting assistant professor. He completed high school in Syria in 1987. In 1991, he received his bachelor's degree in mathematics from Tishreen University. Then, he worked in the United Arab Emirates (UAE) teaching high school for approximately 20 years. In 2014, he moved to the United States and received citizenship. He began his college education here in the U.S. at Indiana University-Purdue University Fort Wayne (IPFW). Since then, he has received his bachelor's degree in mathematics at IPFW. He continued to pursue an accelerated master's program in mathematics through Purdue University Fort Wayne (PFW) and completed this program in the spring of 2019. Then he began the Ph.D. Program (pure math) at Bowling Green State University (BGSU) in the fall of 2019. In April 2023, he defended his Ph.D. Dissertation, which is titled

"Universal Composition Operators on the Hardy space with Linear Fractional Symbols", graduating in August 2023. His hobbies are playing tennis and chess.

**James S. Walker** (UW-Eau Claire Professor Emeritus) participated in the STEAM art exhibit at the NCUR National Conference at UW-Eau Claire on April 13, 2023. He presented several artworks that he created with **Emily J. Gullerud** (UW-Eau Claire alumna, and 5th year graduate student at University of Minnesota). To see their art, click here: <https://www.jameswalkermathmusic.net/NCUR2023/SteAmDisplayPoster.pdf>

**Michael Howe** (UW-Eau Claire Professor Emeritus) had his book published by Springer in their book series, Springer Undergraduate Mathematics Series (SUMS). The book is titled "An Invitation to Representation Theory: Polynomial Representations of the Symmetric Group". More information is available at: <https://link.springer.com/book/10.1007/978-3-030-98025-2>.

**Carolyn Otto** taught an Algebra course at Brown University during the summer of 2023 for the EDGE: Enhancing Diversity in Graduate Education program.

**Chloe Lewis** participated in *Women in Topology IV* and as part of that traveled to the Hausdorff Institute in Bonn, Germany for a week to work in-person with her collaborators. Some of the results of her group's project were on computations in equivariant cohomology and the equivariant Thom isomorphism (and all the other WIT research teams' work). This work will be published later next year in a special issue of *Topology and its Applications*.

**Silviana Amethyst** received the Excellence in Equity, Diversity, and Inclusion Award at the Blugold Breakfast in August 2023. She is one of 8 faculty and staff campus-wide that were recognized for excellence.

**Mohammad Aziz** was selected as a winner of the Karlgaard Faculty Excellence Award. This award is given to an outstanding individual on the faculty of the Department of Computer Science, Mathematics, or Physics/Astronomy.

**Allison Beemer** was one of three faculty members, campus-wide, that was honored this spring 2023 for her work mentoring undergraduate students in research. She received the Emerging Mentor in Research, Scholarship, and Creative Activity Award, given to a mentor who's been at UW-Eau Claire for five or fewer years.

**Mckenzie West** and her collaborator Heidi Goodson (Brooklyn College – CUNY) held their fourth Rethinking Number Theory (RNT) workshop. The RNT workshop is dedicated to stimulating diverse, joyful collaborations in number theory. More information is available at: <https://sites.google.com/view/rethinkingnumbertheory/home>

**Chris Davis** had a paper appear on the arXiv, titled "[Whitney tower concordance and knots in homology spheres](#)"

**aBa Mbirika** and **Mckenzie West** attended the Association of Women in Mathematics Research Symposium in Atlanta, Georgia from Sept. 29 to Oct. 2, 2023. aBa gave a talk in the session on Number Theory at Primarily Undergraduate Institutions. His talk was titled "[Tantalizing Adventures with my Undergraduate Research Students on Numerous Numerical Sequences](#)". West gave a talk in the session on Rethinking Number Theory. Her talk was titled "[Thinking Session: Joyful Collaboration](#)".

**aBa Mbirika**, his UWEC research student **Janee Schrader**, and external collaborator Jürgen Spilker (emeritus professor, Freiburg University in Germany) had a paper accepted by the *Journal of Integer Sequences* titled "[Pell and associated Pell braid sequences as GCDs of sums of  \$k\$  consecutive Pell and balancing-related numbers](#)".

**Carolyn Otto** and **Chris Davis** welcomed a new member to their family – namely, a cat named Obsidian. Obsidian joins this furry family with dogs Cocoa and Hux and cats Oreo, Macaroon, and Nutmeg. Welcome Obsidian – meow!

**Jessica Kraker** welcomed a new member to her family – namely, a puppy named Lars. Lars joins this furry and fishy family with cats Sawyer and Amos, 1 axolotl named Godrick, and a goldfish with no name. Welcome Lars – woof!

**Chris Ahrendt** welcomed a new member to their family – namely, a puppy named Sasha. This is the only fur creature in the house, so far. Welcome Sasha – woof!

The Fall 2023 *Math in the Woods* was again a great success with many faculty/staff/students attending over the course of the three-hour event. The Math in the Woods event is a math event held every start of the Fall semester. It brings together students, faculty, staff, and their families for an afternoon gathering in a park in Eau Claire. There is a BBQ, lawn games, and just soaking up the good weather and good times.

## UW-Milwaukee

*By Jonah Gaster*

In the past year, **Prayagdeep Parija**, **Cong He**, **Daniel Gulbrandsen**, **Brian Hospital**, and **Oliver Meister** have all earned PhDs, with various exciting starts to their careers to report. **Prayagdeep Parija** joins the math department at Hamilton College; **Cong He** is on the faculty at **Allegheny College**; **Daniel Gulbrandsen** has begun a position at Hampden-Sydney College; **Brian Hospital** is an instructor at UWM; and **Oliver Meister** is currently working for Sparkassen Rating und Risikosysteme GmbH. Congrats to all, and we look forward to their future successes!

Recent alum **William Erickson** (PhD 2022) was awarded the MAA's 2023 George Pólya Award this year for his article "Haste Makes Waste: an Optimization Problem". This award is given for "articles of expository excellence published in The College Mathematics Journal". Will is currently a postdoc at Baylor University. Says Will: "I am deeply honored to receive this award, especially because of my admiration for its namesake, the great George Pólya. I had hoped that my article would offer students yet another example of Pólya's central message: 'Your problem may be modest, but if it challenges your curiosity and brings into play your inventive faculties, and if you solve it by your own means, you may experience the tension and enjoy the triumph of discovery.'" Congratulations Will!

This fall our department has hired **Chudamani Poudyal** as an Assistant Professor in Actuarial Science. Prior to UWM, Dr. Poudyal was a Visiting Assistant Professor in the Statistics and Data Science department of the University of Central Florida. Welcome Chudamani!

Preparations have begun for the American Mathematical Society's 2024 Spring Central Sectional meeting, to be held on UWM's campus April 20-21st, 2024. The conference will feature at least seven Special Sessions organized and co-organized by UWM faculty. Highlights include: Stochastic Control and Related Fields: a Special Session in Honor

Group Photo of the Fall 2023 *Math in the Woods*



of Professor Stockbridge's 70th Birthday; Panorama of Holomorphic Dynamics; New Research and Open Problems in Combinatorics; Geometric Group Theory; Combinatorial and Geometric Themes in Representation Theory; Developments in Hyperbolic-like Geometry and Dynamics; and Recent Advances in Numerical PDE Solvers by Deep Learning.

Of special note, one of the three invited Plenary Addresses for the AMS meeting will be delivered by UWM alum **Kevin Schreve** (PhD 2015), currently in a tenure-track position at Louisiana State University. Kevin has several exciting recent successes, including "Mod  $p$  and torsion homology growth in nonpositive curvature", published in *Inventiones Mathematicae* in 2021, joint with **Grigori Avramidi** and **Boris Okun**, and "Torsion invariants of complexes of groups", joint with Boris Okun, accepted for publication in *Duke Mathematical Journal*. We are thrilled to see Kevin's remarkable recent work get some well-deserved recognition. Congratulations Kevin!

## UW Oshkosh

*By John Beam*

This year **Karen Klemm** and **Francisca Fernandez**, both long-standing academic staff members from the Oshkosh campus, have retired. **Fearase Alniemi** (Oshkosh campus) and **John Zhang** (Fox Cities campus) have left in pursuit of more stable employment. We are sorry to lose these valuable teachers and wish the best to them all.

We were very fortunate with our most recent job search and to have hired a new faculty member this year: **Ziyuan Wang** earned his Ph.D. in Mathematics with a concentration in Mathematical Statistics from New Mexico State University in 2021. Welcome aboard, Ziyuan! We'd also like to welcome **Linda Uselmann** to our academic staff.

We congratulate **Kamran Kazmi** on his promotion to full Professor, and **Steve Szydlik** on his promotion to Distinguished Professor. And we congratulate **Eric Kuennen** on receiving the Community Engagement Award from the College of Letters and Science.

The department's outreach activities continued this summer with the **Summer Oshkosh Mathematics Academy** for middle schoolers. For more information go to: <https://uwosh.edu/mathematics/outreach/soma/>

## UW-Platteville

*By James Swenson*

The UW-Platteville math community mourns the loss of two dear colleagues: **Frederic Tufte** and **Irfan Ul-Haq**.

### Irfan Ul-Haq

Professor Irfan Ul-Haq passed away unexpectedly on Sunday, August 20, 2023. Irfan earned a master's degree in 1992 from Punjab University in his native Pakistan and received a second master's degree in 1998 from the University of Alabama at Huntsville before completing a Ph.D. in 2002 at the University of Alabama at Tuscaloosa. He taught at Prairie View A&M University and UW-Stout before coming to UW-Platteville in 2005.

Over the last 18 years, Irfan taught many different courses at Platteville, and he was heavily involved in university governance groups, including as chair of the Faculty Senate. Irfan was a dedicated member of the MAA: he was a regular fixture at the annual meetings of the Wisconsin Section, and served as the chair of the Section and as the leader of Section NEXt.

We are deeply saddened by Irfan's passing, and our thoughts are with his wife **Miyeon Kwon**, who also teaches in the Math Department, and their son Abd Ul-Haq as we share in their sorrow and remember our colleague and friend.

### Frederic W. Tufte

Professor Emeritus Frederic W. Tufte passed away on Wednesday, May 17, 2023. Born in Seattle, Washington, Rick grew up in North Dakota. He earned a master's degree from the University of Missouri and a Ph.D. from the University of Wisconsin-Madison. He taught at UW-Platteville from 1966 until his retirement in 2004.

Rick was a committed teacher and an active colleague. He chaired the UW-Platteville Mathematics Department for six years, and started our annual High School Mathematics Contest, which is now in its 50th year. He was a member of the Wisconsin Mathematics Council and the National Council of Teachers of Mathematics, and served as a reader for the AP Calculus exams. A strong advocate for the MAA, Rick served on the Board of Governors and received the MAA's Certificate of Meritorious Service.

We are truly grateful for the opportunity to know, work with, and learn from Rick. Our heartfelt best wishes are

with Marilyn, his wife of fifty years, and with the rest of Rick's family.

## UW-River Falls

*By Erick Hofacker*

The UW-River Falls Mathematics Department welcomes **McCleary Philbin** as a new Assistant Professor of Mathematics. She recently received her PhD from the University of Minnesota, and her research area is Commutative Algebra and Algebraic Geometry. McCleary is part of a group of organizers who were just awarded the [AMS Mathematics Programs that Make a Difference Award](#) for the Mathematics Project at the University of Minnesota.

**Brooke Krejci** was selected to be a fellow in the Association of Mathematics Teacher Educators (AMTE) Service Teaching & Research (STaR) program for 2023-24. As part of this work she attended a week-long summer institute in Park City, Utah; while continuing with year-long networking with colleagues in the project. Her work with the fellowship will culminate at the AMTE annual conference in February, 2024 in Orlando, FL.

**Michael Loper** passed the actuarial professional Exam FM: Financial Mathematics and **Laurel Langford** passed the actuarial professional Exam P: Probability in Summer 2023. Both are using the experience to hone their skills at coaching our students.

Last year our actuarial club attended the University of Minnesota's Actuarial Career Fair and also joined the actuarial clubs at the University of St. Thomas and UMN in a collaborative networking event called the Actuarial Science Student Symposium. They will also present a poster this year at the UWRF Fall Gala.

Our Wisconsin Mathematics Council (WMC) affiliated mathematics education club held numerous events last year, which culminated with our third annual recruitment for math teachers event in May, 2023. Seventeen students from five different high schools attended the event, as the high school students learned about our students'

journey to becoming mathematics teachers and why they choose the teaching profession.

Six of our mathematics education apprentices spoke at the Wisconsin Mathematics Council (WMC) annual meeting in Green Lake in May, 2023. **Matt Kaiser** engaged the audience in Desmos activities that can be used in the high school classroom. **Grace Pearson** spoke on implementing vertical whiteboards to increase engagement and discourse. **Ally Schlegel** and **Hannah White** presented on putting the 5 Practices into Practice. **Zoe Awcock** and **Samantha Johnson** gave a talk on using double number lines and tape diagrams to teach middle schoolers about ratios & proportions.

We also had two of our graduate students, **Jon Boyle** and **Laura Christianson** present at the conference as well. They spoke on the topics of Data Science and Mathematical Modeling respectively.

The fifth annual Integration Bee was held in April, 2023. It was standing-room only while over 50 spectators and competitors raced to integrate functions correctly. **Dylan Sias** won the high school division and **Daniel Stratton** took home the college title, but all competitors had fun. Some vowed to come back stronger integrators next year.

Students **Andrew Flatz** and **Lezlie Weyer** will be presenting a talk in November, 2023 at the Midwest Sports Analytics Meeting on research they have completed with Michael Loper. Their talk is titled "How to Win at Lightning" and examines, among other things, the optimal starting position in order to win the basketball minigame Lightning (also called Knockout).

Our Mathematics education program continues in the tradition of providing professional development and support for K-12 mathematics teachers throughout the state of Wisconsin and especially in Western Wisconsin. In the spring of 2023 we had 36 in-service and pre-service teachers sign up to participate in a book study on becoming teachers of mathematical modeling in K-12. That project was done in conjunction with faculty and staff at UW-La Crosse and at CESA 6.

## News to Share?

*If you have news you would like to share with the MAA Wisconsin community, contact your campus liaison or the Public Information Officer ([vangroningen@msoe.edu](mailto:vangroningen@msoe.edu)). Does your department not have a liaison? Why not volunteer for the role? Contact the PIO for more information.*

This year we have 62 teachers signed up for the ASKK (Alumni “& Friends” Support through Knowledge and Kindness) project. The project provides support for mathematics teachers at all levels (elementary, middle school and high school) that are both alumni, and have worked closely with our program on previous projects. The monthly sessions consist of a theme, where teachers and administrators with various years of experience share their stories and ask questions of the group. The project also provides an opportunity for alumni to reconnect.

## UW-Stout

*By Steve Deckelman*

The department welcomes two tenure track faculty hires, **Wellington Santos** (Mathematics) and **Kevin Caramancion** (Computer Networking and Cybersecurity). Dr. Santos comes to us from a postdoctoral research position at Virginia Tech. He specializes in algebraic coding theory. Dr. Caramancion is a senior member of the IEEE. He is an information scientist known for his work on information warfare and cyber deceptions.

**Michael Tetzlaff** received a University Outstanding Teaching Award.

**Chris Bendel** received an AMS-Simons Research Enhancement Grant for PUI faculty. Chris is one of 46 inaugural recipients.

**Keith Wojciechowski** is on a year long sabbatical. Keith received a \$93000 grant for dry bean irrigation research. The project involves mathematical modeling and includes professors **Saleh Alnaeli** (Computer Science), **Ahmed El-Magrous** (Computer Science) and **Tyler Skorczewski** (Mathematics).

## UW-Whitewater

*By Balamurugan Pandiyan*

We hired two new faculty members: **Michael Guyer**, and **Dulanjalee Devage Dona**. Michael Guyer earned his Ph.D. in Graph Theory (2023) from Auburn University. Dulanjalee earned her Ph.D. in Statistics (2023) from Texas Tech University. We hired a new full-time lecturer (**Maddie Brus**), and a new Department Assistant (**Bailey Ellefson**). Maddie Brus joined us from the University of Wisconsin–Milwaukee while Bailey joined us after working for Marine Corps for 4 years.

We also hired new part-time academic staff members: **Tom Yerger**, **Tung Nguyen**, and **Nate Burchell**.

**Sobitha Samaranayake** was promoted to Full Professor. **Wesely Hough** was promoted to Associate Professor with tenure.

Congratulations on these accomplishments and welcome to all new department members!

## MAA-Wisconsin Executive Committee

*Representative to the MAA Congress:* James Swenson, UW-Platteville

*Chair:* Petre Nelu Ghenciu, UW-Stout

*Secretary-Treasurer:* Jonathan Kane, UW-Madison

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*Representative to the Wisconsin Math Council:* Erick Hofacker, UW-River Falls

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<https://www.wisconsin.maa.org/governance>