

Wisconsin Section Mathematical Association of America **NEWSLETTER**

Fall 2021

Representative's Report *By Thomas Drucker, UW-Whitewater*

he Congress of the MAA met virtually the three days before MathFest in August of

this year. For those not familiar with the organization, it's worth mentioning that despite the name, the group is not designed to make any decisions for the future of the association. It is designed to distribute information to the mem-



bers and to pass along suggestions from members to the governance of the association. This is the second year in a row that it's met virtually, but perhaps next year it will be back face-to-face.

Last year's meeting was in the midst of the tumult after the death of George Floyd and was largely taken up with issues relating to social justice. That same theme continued this year on the first day, and there was discussion about how to get more involvement on the part of historically black colleges, both faculty and students. It was suggested that efforts should be made to hold section meetings on those campi, while more outreach to the faculty there might elicit more section officers. A committee is working on how to enlarge involvement on the part of other groups as well (e.g., community colleges and research universities), but so far issues connected with looking for more black members were front and center. For example, there were two candidates for president of the Congress, but they deferred to a black candidate, who was elected to that position.

The second day took up financial issues. Michael Pearson, Executive Director of the MAA, claimed that

the association was in better financial shape now than at any previous time during his twenty years of working there. One of the factors was the sale of the association's historic headquarters and the rental of office space nearby instead. It was claimed that the rented space was better designed for the technology of the twenty-first century. We were told that the association would continue to offer services for section meetings if we wished to take advantage of them. More details about the finances can be found in the annual report that was issued to all members. Members are also encouraged to communicate with

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one another via Connect, and this can be used to address the national membership or selected subsets (called communities).

The third day was largely about what the end of the association's sponsorship of the Joint Mathematical Meetings would mean. Committee assignments that traditionally ran through the JMM would now go from MathFest to MathFest (with the result that current assignments would continue for an extra six or seven months). Also, many meetings of SIGMAA's have been taking place at the joint meetings, while they will be encouraged to move to MathFest instead. In particular, the SIGMAA's money can't be spent on activities at the joint meetings, although it was recognized that some activities will still be likely to go on in January rather than August.

The MAA would like to hear the opinion of members who 'attended' the virtual MathFest this year. One issue will be how to enable those unable to attend subsequent meetings in person to be able to take part, and that is being worked on. On a more local basis, the Executive Committee of the Wisconsin section would appreciate any ideas for programs that would be of general interest. The finances of the section (as documented elsewhere in this newsletter) are robust enough to offer support for programs, so please get in touch with any member of the executive committee with your ideas. We want you to get your money's worth out of the association on every level but that's easier if you let us know what you would like.

Chair's Report By Ken Price, UW-Oshkosh

ear MAA-WI enthusiasts, In spite all of the obstacles that keep us apart, I am happy to report that Wisconsin has an active and thriving community of MAA members who contribute greatly to section activities. Anyone who is interested in taking on a great-



er leadership role in the Section should consider one of the executive committee positions. Your contributions and interest in serving the section is welcome.

In spring 2020, the Section's 88th annual meeting was deferred to April 22–24, 2021, because of the Covid-19 Pandemic. Decisions about putting together a virtual meeting were made by a program committee consisting of **Ben Collins**, **Kseniya Fuhrman**, **Jon Kane**, **Ken Price** (me) and **Anthony van Groningen**. I want to thank everyone for their hard work in this group and especially recognize Jon Kane's support in setting up online accounts for all the sessions and hosting meetings with presenters to help orient them to zoom. Jon was the virtual-site coordinator for the Section's first online meeting.

Due to the online format, the Section's meeting was extended from two to three days in order to spread out the talks and not have such long blocks of online presentations. Other changes from previous year's meetings included a new contest on, "Missing Data," which was developed and administered by **Bala Pandiyan**, the Section's Coordinator of Student Activities. The Project NExT-WI workshop was also held virtually on a separate date from the Section meeting.

The program included twenty-six contributed talks by nineteen faculty members and nine students. An invited speaker was featured every day. The Pólya Lecturer, **Talithia Williams** from Harvey Mudd College, went first and presented, "Data-Driven Decision Making: Now and Imagined." On the second day, MAA section visitor **Lisa Marano** of West Chester University presented, "Mathematics and Community Engagement: A story about finding mathematical problems in the community and bringing mathematics into the community." On the final day, James Sellers from the University of Minnesota Duluth presented, "Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series."

Distinguished teaching award winners were recognized in the spring meeting. The 2019-2020 award went to Christopher Frayer and the 2020-2021 award went to Holly Attenborough. Both are members of UW-Platteville's math faculty. All MAA-WI members are encouraged to honor and recognize the many outstanding educators that are part of our section. Your help in identifying and nominating exceptional teachers for this award is encouraged. The deadline for nominations has been set at March 1, 2022.

Student Activities Report

By Balamurugan Pandiyan, UW-Whitewater

t the virtual Spring Section meeting, there were seven students talks, representing five institutions although 29 students attended the conference. In addition, a data-mining contest was given to all student



participants. The contest instructions and materials

Section NExT-Wisconsin by Wesley Hough, UW-Whitewater

The 2021 Spring Panel

ue to the virtual nature of the Spring 2021 MAA -Wisconsin annual



meeting, Section NExT – Wisconsin chose to host their spring panel

independently and virtually through Webex Meetings.

This spring's theme was "Lessons Learned from Teaching during the COVID-19 Pandemic," and was The section's 89th annual meeting will be offered online once again in 2022 and has been scheduled for Thursday, March 31, through Saturday, April 2. The section's current Chair-elect, **Chunping Xie**, has fantastic plans that include featured speaker presentations by MAA section visitor Tim Chartier of Davidson College, Pólya Lecturer Sarah J. Greenwald from Appalachian State University, and distinguished teaching award winner Holly Attenborough from UW Platteville. More details about the spring meeting will be provided in the next newsletter. Please contribute a talk and encourage your students to do so as well.

Best wishes to you and your families during fall 2021.

were posted at the GitHub site at this link. Two students won a \$20 Amazon e-gift card - Nathan Nash from UW-Whitewater and Nicholas Quisler from UW -Stevens Point.

I am planning virtual student activities for the next Spring Meeting. If you have any ideas, I encourage you to send them to me. And please encourage your students to attend, whether or not they are able to give talks.

held virtually on Saturday, February 20, 2021. Holly Attenborough (UW-Platteville), Kseniya Fuhrman (MSOE), and Nathan Warnberg (UW-La Crosse) served as panelists, and they shared some of their teaching successes and failures during the pandemic. We included additional time for attendees to share their own teaching ideas and experiences. Eight Section NExT members attended the panel, bringing total participation to 11 people. We look forward to the possibility of an in-person panel/workshop at the end of the Spring 2022 MAA-Wisconsin annual meeting.

2021 Fall Conference

The Section NExT – Wisconsin annual fall conference

will be held virtually through Zoom on Saturday, October 23, 2021. We are pleased to have **Lara Pudwell** from Valparaiso University as our keynote speaker. Professor Pudwell will discuss mentoring undergraduate research projects, and her title and abstract appear below.

"Finding Your Direction in Undergraduate Research"

Mentoring undergraduates in mathematics research involves many considerations: What are characteristics of a good problem for students? What is an appropriate amount of guidance to provide? What are some unexpected snags a new mentor is likely to encounter? We'll also discuss a variety of positive research outcomes, beyond proving new theorems, that

can be used to define a successful research experience for students.

As per usual, we will offer 25-minute presentation slots for Section NExT members after the keynote address. Abstract submissions are due by October 8, 2021, but interested attendees may register through October 22, 2021.

Search for Section NExT – Wisconsin Director

Wesley Hough's 3-year term as director of Section NExT-Wisconsin ends in Spring 2022. If you're interested in volunteering to serve in the position you are invited to contact Wesley at <u>houghw@uww.edu</u> for more information.

Contests

Submitted by Gabriella Pinter, UW-Milwaukee Report by Laura Schmidt, UW-Stout

American Mathematics Competitions

he AMC 8 competition was held on November 10-16, 2020 (online or in-person options). A total of 245 Wisconsin students participated in the competition. This is significantly less than past years, but of no surprise given the challenges of COVID. The last few years' numbers were 528, 577, 549 and 552, and a significant drop from earlier years of about 959 and 1,300. No students received perfect scores from Wisconsin. The average score for Wisconsin students was 10.42, compared with the national U.S. average score of 10.01. For the sixth year in a row Wisconsin has outperformed the US average! This is a great trend for our Wisconsin students.



The AMC 10 and 12 contests were held on February 4th and 10th, 2021. The total number of Wisconsin students who took the AMC 10 and AMC 12 are in the table below.

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
AMC 10	341	633 (10/12A)	407	506	540	205	569	642	793	756	780	938
AMC 12	321	269 (10/12B)	375	614	690	361	946	880	1014	1152	1254	1502
total	662	902	782	1120	1230	566	1515	1522	1807	1908	2034	2440

There were no perfect scores from Wisconsin. The average score for Wisconsin students compared to the US average scores are in the following table:

	10A	10B	12A	12B
Wisconsin	61.32	55.32	60.68	61.59
US	65.53	62.33	67.42	61.58

Three students qualified for the USAJMO: **F. Li** and **T. Li** both from Madison West High School and **K. Ra-machandrula** from Wisconsin Hills Middle School in Milwaukee. No students qualified for the USAMO. Congratulations to our three Wisconsin students!

MAA-Wisconsin Section High School Contest Examination

The Section contest examination was given on Thursday, December 3rd, 2020. There were 22 schools reporting scores this year for a total of 321 students. Due to COVID we had much fewer students participating this year. The test was offered in multiple formats online/in-person. The number of schools participating did not go down too much (37, 45, 50 and 44 schools in past four years), however there was a large drop in the number of students (829, 713, 930 and 1,157 students in past four years). We will see how numbers look in 2021 next December. The cutoff for the top 1% was a score of 109 out of 120 this year. Due to the large number of perfect scores last year the test difficulty was raised. There were 3 perfect scores this year. The students with perfect scores were **J. Wood** and **T. Rose** (11th graders, Marquette University HS), and **D. Zhou** (11th grade, Hartland Arrowhead HS). Congratulations to all of them!!

The contest winners in combined state contest and AMC scores were **John Wood**, an 11th grader, from Marquette University High School and **David Zhou**, an 11th grader, from Arrowhead Union High School. Congratulations to John and David!

Our hosts completed their third year directing the contest; Dr. **Kevin Haertzen**, and the University of Wisconsin – Platteville. Thank you for your willingness to host the contest.

Volunteers Needed

The Section is looking for volunteers to fill positions on the Executive Committee.

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. Send nominations to Section Chair Ken Price at (<u>pricek@uwosh.edu</u>). Self-nominations are encouraged. Section officers must be members of the MAA.

Section NExT – Wisconsin Director

Wesley Hough's 3-year term as director of Section NExT-Wisconsin ends in Spring 2022. If you're interested in volunteering to serve in the position you are invited to contact Wesley at <u>houghw@uww.edu</u> for more information.

Attenborough to Receive MAA-Wisconsinportance of building positive connections with the
students to build rapport." Assistant Professor Dar
Wackwitz says of Attenborough, "She is a phenomBy Benjamin V. C. Collins, EpicWackwitz says of Attenborough, "She is a phenom

ssociate Professor of Mathematics Holly Attenborough of UW-Platteville will receive the 2021 Distinguished Teaching Award from the Wisconsin Section of the Mathematical Association of America (MAA).



The Wisconsin Section Distinguished Teaching Award was established in 1991 to emphasize the high importance that colleges and universities in Wisconsin place on teaching mathematics. Winning nominees must display extraordinary success in teaching mathematics. At most one award is given per year. Attenborough is the 25th recipient in the 30-year history of the award, and the fourth from UW-Platteville.

Attenborough has been a member of the Mathematics Department for nine years, during which time she has taught fifteen different courses, ranging from Math Explorations for non-science majors to Abstract Algebra for math majors. She has supervised a variety of Senior Seminar and Independent Study projects. She helped to develop a new first-year mathematics seminar, to be taught for the first time in fall of 2021. She has served as advisor for the Mathematics Club, and has led groups of students to the Nebraska Conference for Undergraduate Women in Lincoln, Nebraska.

According to Dr. **Timothy Deis**, Professor of Mathematics, "Dr. Attenborough understands the im-

portance of building positive connections with the students to build rapport." Assistant Professor **Daniel Wackwitz** says of Attenborough, "She is a phenomenal lecturer, but she also is truly gifted at creating inclass activities and outside projects to help students explore and interact with the material."

"It is no surprise to me that Dr. Attenborough has been recognized with this award," says **Molly Gribb**, Dean of the College of Engineering, Mathematics, and Science. "She is passionate about mathematics, and passionate about student learning. Dr. Attenborough continues a long legacy of excellence in teaching mathematics on the UW-Platteville campus, and I am very pleased to congratulate her on this recognition from the MAA – Wisconsin Section."

Attenborough was honored at the Wisconsin Section's Annual Meeting, which took place online on April 23, 2021. Upon receipt of additional supporting material, Attenborough will become the Wisconsin Section nominee for the MAA's Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics.

"She is a phenomenal lecturer, but she also is truly gifted at creating in-class activities and outside projects to help students explore and interact with the material."

--Daniel Wackwitz

Call for Nominations

Nominations for the **2022 Wisconsin Section Distinguished Teaching Award** are now being accepted. The deadline for consideration for this year's award is March 1st, 2022. The nomination form and instructions are available on the MAA-Wisconsin web site at <u>http://section.maa.org/wisconsin/award.html</u>

UW-Platteville Baraboo Sauk County Interviewed by Anthony van Groningen

I think of mathematics as a

friend to whom I can talk any-

where, any time, and can al-

ways rely on, and I love the

fact that I don't even need a

pencil or paper to enjoy a

good problem.

Where did you grow up?

Colombo, Sri Lanka

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

I decided to become a mathematician just before entering college. I probably decided when I realized that I was not only good at problem-solving but loved to grapple with a challenging problem at the back of my head for days until I got a breakthrough. I also loved the feeling when that moment arrived.

What was the influence of your family on your education?

My parents gave me every possible opportunity to further my education. More than anything, I appreciate that they never pressured me into following a particular major (as is common among many parents in the region where I grew up). Instead, their wish was that I am happy in whatever I do. That encouragement gave me the freedom and

support to select mathematics as my future career.

Where did you go to undergraduate school? What about graduate school?

I went to the University of Colombo, Sri Lanka for my undergraduate degree and Purdue University for my master's and doctorate degrees.

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

My seventh-grade tutor Mr. Hemarisi inspired my love for mathematics. My mother recruited him as my mathematics grades were terrible. It only took him one lesson to convince me that I am good at math. His method was 100% problem-solving. He would start with a simple problem and then would ask me to solve a similar one. Then he would gradually increase the challenge and encourage me like a coach. He would not help me unless I was really stuck. I would struggle initially, but once I got the momentum, I would rise to the occasion. I loved the problem-solving so much that I would visit the nearby British Council to find British math textbooks and search for challenging problems. I worked with him even after my grades improved significantly. He predicted in eighth grade that I would be a mathematician or similar. (My only regret is that he passed three months before I launched my first math book in my native language. I tried to invite him as chief

> guest for the launch, but, unfortunately, I could never really thank him).

How did you end up in Wisconsin?

A friend of mine at UW-Whitewater encouraged me to apply to a position, and I came to teach as a Visiting Professor. Since then, I have taught at two

UW institutions and love the UW and the state.

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

As a teacher, I think my students give me a sense of purpose. For example, I would see a student rise in confidence who was previously not confident about mathematics; I would witness them to become engaged and confident due to instruction. Seeing this made me realize that I have made a difference in that student and that newfound confidence (not just in math, but in overall learning) can redesign this student's future for the better. I have helped many students this way in the last few years, giving me a sense of purpose in life, especially as I know that my help will inspire these students long after I am gone. My students also inspire me. As a mathematician, I love when my students ask questions that sometimes help me look at topics I know already in a new light.

What courses do you like to teach?

I love to teach calculus II and linear algebra. In these subjects, we reach a reasonable depth in topics opening up entertaining problem-solving opportunities. In calculus II, for example, we go deep into integration techniques, allowing the class to have many stimulating problem-solving sessions with an extensive collection of novel problems.

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

When I learned mathematics, the teaching was more teacher-centered. Mathematics was regarded (both by teachers and students) as a challenging

subject which only a few with a natural talent could master. Over the years, I have seen a laudable attempt by teachers to make the learning student-centered while seeking interventions to make the subject accessible to broader student populations.

What do you think is the best part of being a mathematician?

I solve most of my problem-solving while running along a wooded trail in Verona, which I think is cool. I think of mathematics as a friend to whom I can talk anywhere, any time, and can always rely on, and I love the fact that I don't even need a pencil or paper to enjoy a good problem.

What is the worst part of teaching mathematics?

The frustration that comes with years of (mostly failed) attempts to make a difference in the learning of certain subjects (such as College Algebra).

How have you been involved with the MAA?

I was the chair of section NeXT from 2012-2015 and

I want to suggest teachers treat instruction as an intellectual endeavor. Take a little time to research solutions for student bottlenecks.

enjoyed organizing training programs for new faculty members.

I was also the chair of the Wisconsin section in 2018, chair-elect in 2017, and past chair in 2019.

How do you describe what you do when you are talking to somebody outside of mathematics?

I tell them that, when I teach, I try to impart the joys and techniques of problem-solving to students as it will support and strengthen students throughout life, in their professions, and in everyday life.

When I talk about my disciplinary research, I tell them I study patterns and connections made by other mathematicians of past and present and find new relationships.

When I talk about my pedagogical research, I tell them that I study what research recommends to overcome certain student obstacles and try them in

> my classroom. I also try and create interventions grounded in research. Finally, I would publish the results so that other teachers worldwide can benefit from the findings.

What of your work do you like the best? What are you most

proud of?

I do research both in pedagogy and disciplinary math. Interestingly, in both categories, I am most proud of the work that I am currently involved in.

I am currently involved in a collaborative project to understand the factors as to why students become math majors, and I am intrigued by what we see so far. I am also involved in another collaborative research project which considers student personalities as six-dimensional vectors. This approach has allowed us to find models for student alignment with optimal jobs and major paths. The model also helps with course assessment. I love it because of the wide range of applications rising from something purely mathematical.

What is your advice to college students?

One advice I would give is not to make a mistake I made early in life: separating mathematical thinking as applied math, pure math, statistics, computer science, etc. Embrace the mathematics of all disciplines (even those disciplines which do not related to mathematics traditionally). This way, you can open yourself to a broader selection of career paths in a world rapidly changing due to technology. It can also help you research and create more profound inventions. (Also, send a thank you to teachers like Mr. Hemarisi who made a difference in your life before it's too late.)

I would also invite students to appreciate and enjoy the struggle when working on a challenging problem or topic. It will help adopt a growth mindset that thrives on challenge and sees failure not as evidence of unintelligence but as a springboard for growth.

Any advice for new teachers?

I want to suggest teachers treat instruction as an intellectual endeavor. Take a little time to research solutions for student bottlenecks. There are many articles available on common student bottlenecks that are easy to read.

Sometimes, it is natural to feel disheartened when your students don't do well in an exam. However, in every class, some students will significantly benefit and move on to the next level and possibly beyond. Most of the time, you will never know the true impact that you had on a student. So, please be assured that you have made a difference every time you walk into a classroom,

Campus News

Beloit College By Ben Stucky

Katherine Harris joined the department as Assistant Professor of Mathematics in the Fall of 2021. She received her Ph.D. in Mathematics from North Carolina State University in July 2021.

Tom Stojsavljevic joined the department as Assistant Professor of Mathematics in the Fall of 2021. He received his Ph.D. in Mathematics from the University of Wisconsin - Milwaukee in May 2019.

Ben Stucky published the article "Cubulating one-relator products with torsion in Groups, Geometry and Dynamics".

With **Mehmet Dik**, student **Brandon Joly** published the article Cold weather teams in the national football league and home-field advantage in the Proceedings of International Mathematical Sciences.

Carroll University

By Kristen Lampe

Tom St. George co-authored the following publication,

appearing last March: "<u>A strategy for Teaching Health</u> <u>Literacy to Physician Assistant Students</u>".

Milwaukee School of Engineering

By Anthony van Groningen

We are pleased to welcome four new colleagues to the department:

Duncan Clark is an Instructor and holds a Ph.D. in Mathematics from Ohio State University. His main research interests are algebraic topology and homotopy theory. More specifically, Clark is interested in Goodwillie's calculus of homotopy functors: including structure inherent to the derivatives of functors, and applications of the theory to categories of structured ring spectra.

Alyssa Genschaw is an Assistant Professor with a Ph.D. in Mathematics from the University of Missouri. Her research combines harmonic analysis, geometric measure theory and partial differential equations to study the parabolic measure corresponding to a divergence form parabolic operator.

Dylan Heuer is an Instructor with a Ph.D. in Mathematics at North Dakota State University. Heuer's research area is

in combinatorics and deals with various generalizations of permutations and alternating sign matrices. Dylan is the grandson of **Jerry Heuer** who was very active in the North Central Section and sadly passed away this year.

Cory Wright is an Instructor in the Mathematics Department at MSOE. He holds a Ph.D. in Mathematics from the University of Nebraska at Lincoln. His research area is in the field of nonlocal partial differential equations and peridynamics where discontinuous phenomena such as crack propagation, fractures, and corrosion are modeled.

UW-Eau Claire By aBa Mbirika

Barron County Campus

Congratulations to **Feroz Siddique** and **Wufeng Tian** who were both granted tenure with promotion to Associate Professor!

Wufeng Tian has been accepted into the 2021-22 Preparation for Industrial Careers in Mathematical Sciences (PIC) Math program. Funding for the project is provided through National Science Foundation grant DMS-1722275 through the Mathematical Association of America Preparation for Industrial Careers in Mathematical Sciences program and the National Security Agency.

Students **Payton Mae Sevals** and **Ruishen Yang**, mentored by faculty member Wufeng Tian, were awarded as Regional Finalists by the American Mathematical Association of Two-Year Colleges Student Research League for a paper they wrote titled "Optimization of settlers and food supply for Mars mission". They <u>presented their work</u> in the 20th annual UW System Symposium for Undergraduate Research, Scholarly and Creative Activity.

Eau Claire Campus

Congratulations to **Carolyn Otto** and **Colleen Duffy** who were both granted promotion to Professor!

Mckenzie West received a grant from the Number Theory Foundation to support the second <u>Rethinking Number</u> <u>Theory</u> workshop. Funding for the workshop was also provided by the UWEC Department of Mathematics.

Shanise Walker joined the editorial board for the MAA MathValues blog in January 2021. This blog explores the diverse voices in the mathematics community. Since 2019, it has been an open space for bloggers to share their experiences and perspectives on relevant and timely issues affecting mathematics. If you have not heard of the blog and/or would like to check out some of the blogs, here is a link to the website: <u>mathvalues.org</u>. If you are interested in contributing a blog, please contact Shanise at <u>walkersg@uwec.edu</u>.

Carolyn Otto wrote a blog post on the MAA MathValues blog.

Christopher Davis, Taylor Martin (Sam Houston State University) and **Carolyn Otto** had a paper appear in the Journal of Topology and its Applications titled "<u>Moves</u> <u>relating C-complexes: A correction to Ciasoni's potential</u> <u>function</u>".

Christopher Davis was a contributing author in a book published by Oxford University Press. It is titled "<u>The Disc</u> <u>Embedding Theorem</u>"...

Taylor Martin (Sam Houston State University) and **Carolyn Otto** had a paper appear in the Journal of Topology and its Applications titled "<u>A geometric construction of</u> <u>the Conway potential function</u>".

aBa Mbirika and his student **Dan Guyer** had a paper accepted by the Journal of Integer Sequences titled "<u>GCD of</u> <u>sums of *k* consecutive Fibonacci, Lucas, and generalized</u> <u>Fibonacci numbers</u>".

Christopher Davis, **Shelly Harvey** (Rice University), and **Carolyn Otto** are organizing a special session at the Joint Mathematics Meetings titled "Knots, Links, 3-manifolds and 4-manifolds."

Emeritus faculty **Michael Howe** had a book accepted in the <u>SUMS Reading series</u>. The Readings is a subseries of SUMS fo book that don't fit a traditional course but are nevertheless very valuable to undergraduate students.

The UWEC Fall 2021 event *Math in the Woods was a* great success this year. Of the 31+ students that came, the first 15 were all first years. We had 15+ faculty come and many of their significant others and/or fur babies (all dogs). Some families of students also came – we had a few parents and even a grandparent! It is always great to meet the families, and I think the families love it too to know that their child is in good hands with our UWEC math faculty/staff/students family! A small photo journal of this year's event can be found at <a href="http://www.http://wwww.htttp://wwww.htttp://wwwwwww

people.uwec.edu/mbirika/

Math_in_the_Woods_Fall_2021_photo_journal.pdf.

UW-Oshkosh

By John Beam

For a second year in a row, we are losing several longstanding faculty to retirement. **Hosien Moghadam** joined UWO in 1983 after earning his Ph.D. at the University of California, Riverside; he served us for several years as department chair. **Saadat Moussavi** joined us in 1986, also having earned his Ph.D. from the University of California, Riverside. **KLD Gunawardena** joined us in 1989 after earning his Ph.D. from Michigan State University; he served as our department chair for the past 14 years. **Chris Edwards** joined us in 1991 after earning his Ph.D. from Montana State University. We are sorry to see these fine people leave after being our friends and colleagues for so many years, and we wish them all a happy retirement.

On a more positive note, we are fortunate to have hired a new faculty member this year: **Shahid Mohammad** recently earned his Ph.D. in Statistics from Central Michigan University. Welcome aboard, Shahid! We'd also like to welcome a graduate of our M.S. program, **Daniel Lollar**, as he joins our academic staff.

In October, our campus will be hosting the first annual conference of the Wisconsin Association of Mathematics Teacher Educators.

UW-Platteville

By James Swenson

We wish a very happy retirement to **Mike Ira** and **Kayle Hertz**. Mike and Kayle taught for a combined 39 years in the UW System.

We are extremely pleased to honor **Holly Attenborough**, winner of the 2021 Underkofler Excellence in Teaching Award!

Congratulations to **Tim Deis** and **Jodean Grunow**, whose proposal (joint with **Leigh Monhardt** of the UW-Platteville School of Education) to support and develop students seeking teaching certification in STEM fields has been funded by the National Science Foundation. Tim and Jodean welcome inquiries from interested administrators, teachers, high school students, and parents.

We're happy to announce the approval of our new Data Science minor! This fall, the first UW-Platteville students are enrolling in the new minor, which complements our year-old Data Science major.

UW-Stout

By Steven Deckelman

The department hired two tenure track computer scientists this year, **Alexi Brooks** (PhD UW-Madison) and **Ahmed El-Magrous** (PhD South Dakota State).

Tyler Skorczewski received tenure along with promotion to associate professor.

Greg Bard has taken a Leave of Absence for the 2021-2022 academic year, to pursue an online Graduate Certificate in Data Science from Harvard University's Extension School.

Laura Schmidt was interviewed by Lisa Marano for the Math Values Blog of the MAA. The interview was on the MAA Wisconsin Section High School Math Contest that she directed for the past 13 years (just resigned from the position this summer). The blog post should come out soon. Also, our Math TLC is moving to a co-requisite structure for our Intermediate Algebra class and will eliminate our Beginning Algebra class. This is in response to the Wisconsin UW-System Math Initiative. We're hoping the co-requisite structure works well.

Tyler Skorczewski published a paper with undergraduate student Brandon Andersen. '<u>A dynamic energy budget</u> model of ornate box turtle shell growth'

Several faculty members participated and enjoyed working with the UW System Math Initiative Community of Practice (CoP) sessions this summer.

Min Shu, along with co-authors Ruigiang Song and Wei Zhu had their papers "The 'COVID' Crash of the 2020 U.S. Stock Market" published in the North-American Journal of Economics and Finance, and "The 2020 Global Stock Market Crash: Endogenous or Exogenous?" published in the Physica A: Statistical Mechanics and its Applications. She presented "The 2020 U.S. Stock Market Crash" on Aug. 10 at the Joint Statistical Meetings (JSM), one of the Largest Statistical Events in the World. She also presented "Dissecting the 2015 Chinese Stock Market Crash" on Jun. 2 and "Analysis of 2020 Global Stock Market Crash" on Jun. 4 at the Symposium on Data Science and Statistics (SDSS). Min became a fellow of the Gold'21cohort of MAA Project NExT in Jun. and attended the MAA Math-Fest meeting in Aug. She received the Faculty Research Initiative Grant from UW-Stout. She is serving as the Guest editor for the Feature Paper Special Issue: Quantitative Finance, in the international peer-reviewed open access quarterly journal: Stats.

Greg Bard is planning to have an electronic pre-release of the 2nd edition of Sage for Undergraduates in mid-October. The finished electronic edition will be ready around JMM 2022. Greg also presented at a conference called The Polytechnic Summit, held virtually but hosted by The Technical University of Dublin. The title was "The Centipede System for the Organization of Online Coursework" and the date was June 3rd, 2021.

Michael Tetzlaff and **Seth Berrier** along with a team of Seth's capstone students submitted a paper to the IS&T archiving conference that was co-presented by Seth and Emily Shaffer (one of the capstone students): Vessel: A Cultural Heritage Game for Entertainment, Blake Bissell, Mo Morris, Emily Shaffer, Michael Tetzlaff, and Seth Berrier, IS&T Archiving 2021.

UW-Whitewater

By Balamurugan Pandiyan

We hired three new academic staff in fall 2021. Their names are **Ramadan Elsharif**, **Morgan Gauvin**, and **Josh Ruk**.

We had five retirements in the last academic year. Two faculty, **Julie Letellier** (after serving the department for 30 years) and **Bob Siemann** (42 years of service) and four academic staff - **Joan Stamm** (27 years of service), **Kelly Strait** (7 years of service), **Thomas Drucker** (20 years of service), and **Lori Grady** (20 years of service).

Ki-Bong Nam gave two talks: "Notes on Transcendental Numbers", Math Research Center (**Jungho Yoon**), Ewha University, (partially supported by Strategic Priority Fund, Dept. of Math), June 25, 2021; and "Notes on Transcendental Numbers and Generalized Weyl Algebras", Applied Algebra and Optimization Research Center (**Gi-Sang Cheon**), SKKU, Seoul, Korea (partially supported by Strategic Priority Fund, Dept. of Math), July 2, 2021.

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