Wisconsin Section Mathematical Association of America **NEWSLETTER**

Representative's Report By Clare Hemenway, UW-Stevens Point at Wausau



MathFest and the annual MAA Congress Meeting in Cincinnati were abundant with camaraderie, collegiality and stimulating mathematical and pedagogical talks. While it is great to connect at meetings, the

leadership of the MAA realizes that most of the MAA members cannot attend national meetings. There has been much change in the MAA in the last few years and many of these changes will enable MAA members to participate more fully in the benefits of the MAA.

One new addition to the MAA benefits is the digital communication tool MAA Connect. Also, membership now comes with expanded access to mathematics journals, such as PRIMUS and CHANCE. There are new membership categories (such as a lifetime membership)—so check out all these options at the MAA website and be sure to become a member or renew your membership.

The MAA will no longer be a co-managing partner in the Joint Mathematics Meeting after January of 2021. While this is disappointing to many, this action will free up funds that may strengthen sectional meetings. Starting in 2021 there will be

Contents

Representative's Report 1
Chair's Report 2
Student Activities Report
Contests
Section NExT-Wisconsin 4
Drucker Receives Distinguished Teaching Award 5
Call for Speakers 6
Know Your Wisconsin Mathematician7
Campus News 8
MAA-Wisconsin Executive Committee

more sectional support for visiting speakers and the MAA is exploring options such as travelling workshops and other professional development opportunities at the Section level. The MAA wants to hear your ideas on how they can support your work as a mathematics professional. Feel free to contact me (clare.hemenway@uwsp.edu) and I will convey your suggestions to the MAA leadership.

Lastly, please peruse the <u>MAA Instructional</u> <u>Practices Guide</u>. It is available for free from the MAA website. I look forward to seeing you at the Spring Meeting at UW Stout.

Call for Nominations

Nominations for the **2020 Wisconsin Section Distinguished Teaching Award** are now being accepted. The deadline for consideration for this year's award is January 15, 2020. The nomination form and instructions are available on the MAA-Wisconsin web site at <u>http://sections.maa.org/wisconsin/award.shtml</u>

Chair's Report

By Kseniya Fuhrman, Milwaukee School of Engineering



The 87th annual spring meeting of the Wisconsin Section of the MAA, held at Carthage College on April 12-13, 2019, was a great success. My thanks to the faculty and staff at Carthage for extending their hospitality and hosting the event.

We especially appreciate the leadership and commitment of **Mark Snavely** who served as the local coordinator.

We heard three great talks from our invited speakers. Fredric Ancel (UW-Milwaukee) spoke on Friday afternoon on "Symmetry, Orbifolds and the Alhambra Mosaics." After the banquet, the president of MAA, Michael Dorff (Brigham Young University) spoke on "How Mathematics is Making Hollywood Movies Better." Erica Flapan (Pomona College) who is currently serving as Editor in Chief of Notices of the AMS gave the invited talk "An Introduction to Spatial Graph Theory" on Saturday. There were 47 additional talks, which included 27 student talks. The gameshow Face Off! was a huge success, as always! Many thanks to Steve Szydlik (UW-Oshkosh) and Benjamin V.C. Collins (UW-Plateville) for producing and hosting this highly anticipated event. After the conclusion of the spring meeting, we had an outstanding professional development opportunity. MAA president Michael Dorff facilitated a workshop on Undergraduate Research, which was sponsored by SIGMAA-UR and Section NExT-WI. Thank you to all

the speakers and participants for making the spring meeting such an energizing and enriching event.

We were honored to recognize Kenosha area teachers **Samantha Pustina** (Bullen Middle School) and **Samantha Padecky** (Harborside Academy) who were selected by Carthage faculty as the Outstanding Local Teacher Award recipients. Congratulations to **Thomas Drucker**, of University of Wisconsin – Whitewater, on receiving the Distinguished Teaching Award from the section. (See the article elsewhere in this issue.) I encourage all section members to consider sending in a nomination for the MAA Wisconsin Section Teaching Award. We want to continue honoring and recognizing the many outstanding educators that are part of our section.

The 2020 annual meeting will be held at UW-Stout on April 24-25. Chair-elect **Ken Price** is putting together an exciting program. **Lisa Marano** (West Chester University), **Eric Rawdon** (University of St. Thomas) and **Thomas Drucker** (UW-Whitewater) will be our invited speakers. Please consider giving a contributed talk and encourage your students to do so as well.

Lastly, if you are interested in serving on any of the positions on the executive committee of the section, please let us know. We would love to welcome new faces to the executive committee in the near future.

I hope to see you at the spring meeting at UW-Stout!

Bylaw revision

The MAA is now requesting that each section review their bylaws every ten years. Our bylaws are up for review in 2022. The process will begin in the summer of 2020, with an ad-hoc committee. If you are interested in serving on this committee, please contact Section Chair Kseniya Fuhrman, <u>fuhrman@msoe.edu</u>.

Student Activities Report By Balamurugan Pandiyan, UW-Whitewater



At the Spring Section meeting in Carthage College, there were twentyseven student talks, representing eleven different institutions. As usual, **Steve Szydlik** from UW Oshkosh hosted Face Off! The Math Game Show. The top three teams, in order, were a mixed team from

Carthage College and Northwestern Illinois University, UW-Stevens Point and Roosevelt University. The pictures from the game are available at the Face Off! Facebook Page. Prizes came courtesy of Wolfram Research, and each student who played received a oneyear subscription to the student edition of Mathematics. Many thanks to **Carol Cronin** of Wolfram for her longtime support of Face Off, and to all the students who played!

In addition, there was a four-question quiz available in

the student break room. Students had unlimited time to answer some reasonably challenging questions. **Matthew Clubb** of UW-Whitewater won the first prize and took home a metal USB Flash Drive 256 GB and **Evan Seghers** of UW-Whitewater won the second prize and took home a travel coffee mug decorated with math equations. The student break room also featured three posters describing the brief story of mathematicians, Srinivasa Ramanujan, Leonhard Euler and Edward Norton Lorenz. I am planning student activities for the next Spring Meeting at UW-Stout. If you have any ideas, I encourage you to send them to me. Also, please encourage your students to attend, whether or not they are able to give talks.

Contests

By Laura Schmidt, UW-Stout



The AMC 8 competition was held on November 13, 2018. A total of 577 Wisconsin students participated in the competition, similar to the last few years' numbers of 549 and 552, and a significant drop from previous years of about 959 and 1,300. No students received a perfect score

from Wisconsin. The average score for Wisconsin students was 9.08, compared with the national U.S. average score of 8.48. For the fourth year in a row Wisconsin has outperformed the US average! This is a great trend for our Wisconsin students. The next AMC 8 competition is on November 12th, 2019.

The AMC 10 and 12 contests were held on February 7 and 13, 2019. A total of 407 Wisconsin students took the AMC 10, down from 506 in 2018, 540 in 2017, 569 in 2015, and 642 in 2014. A total of 375 took the AMC

12, down from 614 in 2018, 690 in 2017, but similar to 361 in 2016. This was a significant drop from 946 in 2015 and 880 in 2014. This continues the trend in decreasing numbers of students participating for the AMC 10 and 12.

There were no perfect scores from Wisconsin. The average score for Wisconsin students on the 10A exam was 54.03 (compared to 51.50 for the US and Canada overall); the average Wisconsin score on the 10B exam was 55.15 (compared to 58.34); the average Wisconsin score on the 12A exam was 50.43 (compared to 48.92); and the average Wisconsin score for the 12B exam was 52.06 (compared to 56.45).

Two students qualified for the USAJMO; **J. Cai** and **F. Li** both from Madison West High School. One student qualified for the USAMO; **A. Karan** from University School-Milwaukee. Congratulations to our three Wisconsin students! The next AMC 10/12 competitions are on January 30th and February 5th, 2020.

MAA-Wisconsin Section High School Contest Examination

The Section contest examination was given on Thursday, December 6th, 2018. There were 45 schools reporting scores this year for a total of 713 students. This is similar as far as the number of schools participating (50 and 44 schools in past two years), however fewer overall students (930 and 1,157 students in past two years). The cutoff for the top 1% was a score of 111 out of 120 this year. There were two perfect scores this year. The students with perfect scores were **A. Wang**, 11th grader, from Homestead High School; **A. Sahai**, 12th grader, from James Madison Memorial. Congratulations to the two of them! The next MAA high school contest is on December 5th, 2019.

The contest winners in combined state contest and AMC scores were **Thomas Rose**, a 9th grader, from Marquette University High School and **Tainxiao Yang**, an 11th grader, from James Madison Memorial High School. Congratulations to Thomas and Tainxiao!

Thank you to our hosts that are directing the contest for the second year; **Kevin Haertzen**, and the University of Wisconsin – Platteville.

Section NExT-Wisconsin By Wesley Hough, UW-Whitewater



2019 Spring Workshop: Typically, Section NExT-Wisconsin has a panel discussion immediately following the second day of the MAA Wisconsin Sectional meeting in the spring. For the meeting in April 2019, however, we were fortunate to have **Michael Dorff** (professor at

Brigham Young University and President of the MAA) lead a workshop on undergraduate research in place of the usual panel. Professor Dorff presented excellent advice on navigating the undergraduate research relationship between student and professor as well as on choosing a good research problem. Workshop registration was open to any interested meeting attendees, not just traditional Section NExTers, and we had around 25 participants.

2019 MathFest Section NExT Leaders Meeting: MAA leadership has started allocating time during the annual MathFest meeting for Section NExT leaders to come together, share ideas, voice concerns, and build a collaborative community around providing high-quality programming. This first meeting was quite helpful for meeting the various Section NExT leaders and learning about the differences in organization, programming, and policies between the sections. The new platform MAA Connect was recommended for future use in collaboration between sections.

2019 Fall Conference: The Section NExT – Wisconsin annual fall conference will be held on November 2 and 3 at the University of Wisconsin – Platteville Baraboo Sauk County (in Baraboo). We are pleased to have Gulden Karakok from the University of Northern Colorado as our guest speaker. Professor Karakok is the chairperson for the MAA Committee on Assessment, and she will be speaking about best practices in classroom learning assessment in alignment with the MAA Instructional Practices Guide. We expect good attendance (as per usual) and interesting talks from conference attendees. To promote greater inclusivity with the Section NExT program, we will extend invitations to participate to early career mathematics instructors more broadly, including those in visiting or adjunct positions, in addition to the usual pre-tenured faculty members.

Drucker Receives Distinguished Teaching Award By Benjamin V.C. Collins, UW-Platteville



Mathematics Lecturer **Thomas L. Drucker** of UW-Whitewater received the 2019 Distinguished Teaching Award from the Wisconsin Section of the Mathematical Association of America.

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. Drucker is the 23nd recipient in the 28-year history of the award, and the second from UW-Whitewater.

Drucker has been a member of the UW-Whitewater math department for 18 years, during which time he has taught 15 different courses. He is an active mentor for the UWW Chess Club and the Jewish Student Organization, and runs a Math Circle for area high school students. Drucker has previously received UW-Whitewater's Excellence Award for Instructional Academic Staff, the Campus Assessment Response and Evaluation (CARE) Giver Award, and the Mary Pinkerton Award.

Angela Harlan, the chair of UW-Whitewater's Mathematics Department, says that in Drucker's classes, "mathematics becomes a story to be told rather than simply a set of rules to be followed. This makes him the ideal candidate for teaching courses such as the History of Mathematics and Mathematical Ideas." Drucker's former colleague **Jonathan Kane** describes his classes as "energetic and filled with an enthusiasm that you can cut with a knife." Current UW-Whitewater mathematics lecturer **Balamurugan Pandiyan** notes that, "He mentors many new academic staff and faculty, including myself, explaining the department policies, giving tips on teaching, providing a listening ear, and helping us grow into stronger teachers."

"Mr. Thomas Drucker is teacher's teacher and we in the College of Letters and Sciences at the University of Wisconsin-Whitewater are extremely proud to call him one of our own," says **Franklin Goza**, Interim Dean of the College of Letters and Sciences. "Tom is truly deserving of the recognition that comes with the receipt of this award. It would be extremely difficult to find a more dedicated instructor."

Drucker was honored at the Wisconsin Section's Annual Meeting at Carthage College on April 5. Upon receipt of additional supporting material, he will become the Wisconsin Section nominee for the MAA's Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics.

Call for Speakers

88th Annual Meeting of MAA Wisconsin Section, April 24-25, 2019 UW-Stout

Talks of all kinds are welcome, particularly ones that are accessible to students.

If you wish to present a talk, please complete the form at:

http://sections.maa.org/wisconsin/meetings.shtml

Due date: March 1, 2020. Talks received after March 1 will be considered only as time and space permit.

Student Speakers

The Wisconsin Section of the MAA encourages undergraduate students who have done research in mathematics to give a 25-minute presentation about their work at the Spring Meeting.

If you wish to present a talk, please complete the form at:

http://sections.maa.org/wisconsin/meetings.shtml

Due date: March 1, 2020. Talks received after March 1 will be considered only as time and space permit.

Volunteers Needed

The Section continually seeks nominations for **Chair-Elect**. This is a three-year 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 Immediate Past Chair continues to sit on the Executive Committee, and oversees the selection of the Distinguished Teaching award recipient. Self-nominations are encouraged.

In addition, the Section is currently seeking someone to fill the position of **Public Information Officer**. The Public Information Officer edits the newsletter and maintains the Section web page. The candidate would shadow the current Public Information Officer, Benjamin Collins, during the 2020-2021 academic year. The new Public Information Officer's five-year term would then begin in Spring 2021 and run through Spring 2026.

For more information on the duties of the MAA-Wisconsin Executive Committee, see the Executive Committee Handbook at <u>http://sections.maa.org/wisconsin/MAA-WIExecCommitteeHandbook.pdf</u>.

Send nominations to Section Chair Kseniya Fuhrman at (<u>fuhrman@msoe.edu</u>). Section officers must be members of the MAA.

Interview with Rob Calcaterra, UW-Platteville, by Benjamin V.C. Collins, UW-Platteville

Fall 2019

Where did you grow up?

Brooklyn, New York. I went to Sheepshead Bay High School which is near Coney Island.

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

I really enjoyed mathematics both in undergraduate and graduate school, particularly abstract algebra. I was a teaching assistant as well in graduate school and enjoyed working with students. These experiences led me to a career in teaching undergraduate mathematics.

Where did you go to undergraduate and graduate school?

I went to Brooklyn College for my undergraduate degree, and UW-Madison for my Ph.D.

What was the influence of your family on your education?

Both of my parents received high school diplomas but neither attended college. They were supportive of their children going to college but really had no idea what one did in college. I think my mom would

have preferred that I went to medical school because it was something she could relate to better. I was the first of my siblings to graduate high school so none of them were able to offer much guidance either. I had to rely on teachers and friends to find out about education and career options.

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

There were primarily two teachers who piqued my interest in mathematics, David Bloom at Brooklyn College and Marty Isaacs at Madison.

How did you end up at UW-Platteville?

When I finished graduate school at Madison, my wife was still working on her degree. Platteville was a convenient place to be while she finished her degree. Her family is also in the Madison area so staying here made sense.

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

Interacting with students and my colleagues in the department is by far and away the best part of the job. I will miss these interactions when I retire.

What courses do you like to teach?

I like to teach most of the courses offered by our program. I particularly enjoy the theory courses in abstract algebra and introductory analysis. I also like to work with students on their Senior Seminar projects.

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

The availability of technology has increased greatly. When I was in high school we used trig and log tables in our mathematics and science classes. As an undergraduate, I had to use a slide rule for computations in science classes and punch cards for computer programs. A calculator, PC, or laptop now makes that stuff obsolete. Also,

experiences of my life.

governmental support for education has waned over time. When I completed graduate school, I was broke but I wasn't in debt. My younger colleagues have student loan debt that is staggering. The department has

lost several promising young faculty members who have decided to move to other professions that pay more than teaching to deal with their debt load.

How have you been you involved with the MAA?

I attend the annual sectional meetings and often give a talk at these meetings. I also submit solutions to problems posed in Mathematics Magazine. [In 2006, Rob was the MAA-Wisconsin Section's Distinguished Teaching Award winner. Typically, he didn't mention that in response to this question.]

What is the worst part of teaching mathematics?

Administrators. I am astounded by the proliferation of administrators on campus in the time I have been at this campus.

How do you describe what you do when you are talking to somebody outside of mathematics? I've learned to not even try.

What is your advice to college students?

Enjoy your time in school. For me, it was one of the most personally fulfilling experiences of my life. You were able to focus on learning and growing.

Enjoy your time in school. For me, it was one of the most personally fulfilling

Campus News Milwaukee School of Engineering *By Chunping Xie*

Three new faculty members joined the Mathematics Department in Fall 2019.

Niles Armstrong, Ph.D. in Mathematics specializing in Partial Differential Equations, Kansas State University. Dr. Armstrong brings extensive experience and will teach a broad spectrum of mathematics courses. His research focuses on a generalization of the Mean Value Property.

Brandon Reid, FSA, Ph.D. in Mathematics specializing in Mathematical Modeling, University of Alabama. Dr. Reid worked at Lincoln Financial Group as an Actuarial Analyst for two years and is a Fellow of the Society of Actuaries. Dr. Reid will contribute to the Actuarial Science program by teaching, expanding course offerings, and continuing to build industry relations.

Won Chul Song, Ph.D. in Statistics, Pennsylvania State University. Dr. Song taught at the University of Findlay as an Assistant Professor of Mathematics before he joined MSOE. Dr. Song will primarily teach statistics courses and assist the Actuarial Science program.

Other MSOE Math faculty news:

Yu-Sin Chang, who joined the department in Fall 2018, passed Society of Actuaries' (SOA) Exam P, Exam FM and Exam IFM during 2018 – 2019 Academic Year.

Actuarial Science Program News:

Actuarial Science seniors **Alec McClintock, Matthew Mcmaster** and **Amanda Mickelson** presented their research project entitled *Mathematics of Insurance and Gambling* at the Pinnacle U Conference in Bloomington, IL, March 28, 2019.

Twelve MSOE Actuarial Science students took Exam P in May 2019 with an 83% pass rate, surpassing the national pass rate of 48% as announced by SOA.

UW-Eau Claire By aBa Mbirika

Seven new faculty members joined the UWEC mathematics department this fall:

Katie Elliott joins the department as a Visiting Assistant Professor. She received her Ph.D. from Baylor University. Her research interests lie in operator theory and functional analysis. Katie is originally from Southern California. In her free time, she likes to spend time outside with her two dogs, Harper and Strider.

Melissa Troudt joins the department as an Assistant Professor of Mathematics Education. She received her Ph.D. from the University of Northern Colorado where she also completed a post doc appointment. Her research interests lie in mathematics teacher education, specifically, mathematical knowledge for teaching and the processes to construct mathematical proofs and arguments. Outside the office you will find her enjoying a great cup of coffee, exploring parks and hiking trails with her family, or sampling local beers.

Tim Pervenecki joins the department as a Visiting Assistant Professor. He received his Ph.D. from the University of Louisville. His research interests lie in mathematical biology and in combinatorics and graph theory. Other interests of his include playing Pokémon Go and cooking.

Surina joins the department as a Visiting Assistant Professor. She received her Ph.D. from the University of Louisville. Her research interests lie in image segmentation and PDE. She has previously taught at Jefferson Community & Technicla and College and at duPont Manual High School in Louisville. Her other interest are yoga, Zumba, walking outdoors, and painting.

Mark Battell joins the department as a Visiting Assistant Professor. He received his Ph.D. from North Dakota State University and his research interests lie in commutative algebra and factorization theory. Mark is originally from the La Crosse/Winona area and his favorite food is pizza. **Mckenzie West** joins the department as an Assistant Professor. She is a graduate of Emory University and her research interests lie in arithmetic geometry and computational number theory. Before coming to Eau Claire, Mckenzie taught at Reed College and Kalamazoo College. She is currently doing research with one UWEC student, Tyler Gonzales. They are exploring Brauer groups and curves on surfaces. Other interests of Mckenzie include knitting, board games, and her dog, Pepper.

Jess Vriesema joins the department as an Associate Lecturer and is excited to be teaching statistics. He most recently came from the University of Arizona in Tucson. Jess's research interests are in numerical modelling and computational astrophysics, especially as applied to giant planet atmospheres. His other academic interests include data visualization, high performance computing, numerical analysis, and how he could bring these things to the classroom. On the side, he enjoys board/card game design, baking bread and promoting unity and intergroup dialogue.

James S. Walker retired in June 2019. He taught for 37 years in the Department of Mathematics. For the last 23 years, he was a full professor. Prof. Walker published papers on complex variables, fast Fourier transforms, wavelets, Fourier series, image compression, image restoration, mathematics and music, and mathematics and art. He published books on Fourier Analysis, Fast Fourier Transforms, Wavelets, and Mathematics and Music. He created, and taught for many years, courses on Fourier Analysis, Fourier Optics, Digital Signal Processing, Digital Image Processing, and Mathematics and Music.

Rob Berg was recently promoted to the rank of Senior Lecturer; he has been teaching for the department since 2011. Rob is a graduate of UWEC, graduating in the Fall 1991 semester with a Bachelor of Science degree in Mathematics. He finished his Master of Science degree in Mathematics Education at UW-Oshkosh at the end of the Fall 1995 semester.

Chris Davis was recently granted tenure starting in Fall 2019. He is very pleased to have the honor to teach at

UWEC until his retirement decades from now. And the Department Personnel Committee is honored, too, to have a new member with whom to share the committee-workload.

Carolyn Otto, Associate Professor of Mathematics, wrote a chapter in the recently published Springer book "<u>A Celebration of the EDGE Program's Impact on the</u> <u>Mathematics Community and Beyond</u>" (pgs. 175-193). This book is authored by the women in mathematics affiliated with the program EDGE (Enhancing Diversity in Graduate Education). It includes refereed chapters on mathematics research, teaching, outreach, and career paths. Otto's article focusses on teaching and is titled *Linear Algebra, Secret Agencies, and Zombies: Applications to Enhance Learning and Creativity*.

Danielle Amethyst Brake has had several publications this year. "3D Printing Solid Möbius Surfaces," coauthored with undergraduate Travis Wert, Notre Dame '17, appeared this summer in *The Minnesota Journal of Undergraduate Mathematics*. "Singular Value Decomposition of Complexes," coauthored with Jonathan Hauenstein, Frank-Olaf Schreyer, Andrew Sommese, and Michael Stillman, appeared in the *SIAM Journal of Applied Algebra and Geometry*. A third article, "Computing complex and real tropical curves using monodromy," with Jonathan Hauenstein and Cynthia Vinzant, will appear in December in the *Journal of Pure and Applied Algebra*.

Danielle Amethyst Brake is spending Fall 2019 at the Institute for Computational and Experimental Research in Mathematics (ICERM) in Providence, Rhode Island, in addition to teaching her normal load online. The Fall program is "Illustrating Mathematics." Danielle 3D prints and otherwise visualizes algebraic objects and is sharing and learning with a diverse group of mathematicians and artists. She looks forward to her return to UWEC in the spring.

aBa Mbirika organized the 6th annual UWEC Math Dept Math in the Woods event. This year's event was held in Carson Park in Eau Claire and included the usual revelry of math faculty and their families with our math students enjoying a BBQ, hikes in the woods, lawn

Page 10

games, and of course outdoor mathematics on the white boards! Additional surprise this year were returning math alumni students: **Dawn Paukner, Emily Gullerud, McKenzie Scanlan**, and **Hunter Hartke**.

Emily Gullerud (May 2019 UWEC alumna and current PhD student at University of Minnesota) and **aBa Mbirika** had their joint paper accepted by the journal *Integers: Electronic Journal of Combinatorial Number Theory*. The paper is called "An Euler phi function for the Eisenstein integers and some applications." An arXiv version of it is available <u>here</u>.

The second edition of *Mathematics and Music: Composition, Perception, and Performance* by James S. Walker (Math UWEC) and Gary W. Don (Music UWEC) was published on September 12 by CRC Press. The book is written for college-level interdisciplinary courses on math and music. It has new content that improves on the first edition, which received a BLL rating from the MAA (i.e., on list of books suggested for undergraduate mathematic libraries). It has been used as a textbook for mathematics and music courses at the college level, including UW-Eau Claire, since 2013. More information is available at James Walker's website.

Mohammad Aziz and his wife **Sonia Afrose** brought their 3rd child, **Ryefa Moomtahina Aziz**, into the world on Tuesday August 6 at 7:58 am. She was 19.5 inches long and weighed 6.9 lbs on that day. Both mom and baby are doing fine. Her siblings **Audrika** and **Aroni** are thrilled with their new sister.

Simei Tong's daughter **Xiaowen Hogue** and her husband **John** brought their daughter **Amelia** into the world on August 25th. Amelia was 22 inches long and weighed 9lb 3oz on that day. Simei was very happy to meet her first granddaughter.

UW-Milwaukee By Jay H. Beder

Jonah Gaster has joined the Department of Mathematical Sciences this fall as Assistant Professor. Gaster earned his PhD at the University of Illinois at Chicago in 2014 under the supervision of David Dumas. He spent the following three years as a Visiting Assistant Professor at Boston College, and then two years as a CRM-ISM Posdoctoral Fellow at McGill University working with **Piotr Przytycki** and **Daniel Wise**. His focus is combinatorial aspects of hyperbolic surfaces and Teichmuller spaces.

Chris Hruska (topology) and **Wei Wei** (actuarial science) have been promoted, Hruska to the rank of full professor, Wei to Associate Professor with tenure.

The Department was deeply saddened to lose long-time senior lecturer **Larry Grogan**, who died suddenly this past spring.

Susanne Boyd took over as Chairperson this summer. Prof. Boyd's area of research is dynamical systems.

Alumnus **Taylor Gehrke** (BA'15 in Actuarial Science) has become a Fellow of the Society of Actuaries, the highest designation of the profession. Typical time to earn such credentials is 6-10 years. Taylor is an Actuarial Consultant at the Milwaukee office of Oliver Wyman. He is also a frequent contributor to professional development seminar for actuarial majors. The actuarial science program at UW-Milwaukee is designated as Center of Actuarial Excellence by the Society of Actuaries and is one of 17 such programs in the country.

UWM undergraduate **Andrea Gasparini**, Professor Emeritus **Eric Key**, and **David Radcliffe** (PhD 2001) have coauthored a paper on "A geometric approach to the natural exponential function," to appear in the College Mathematics Journal. The paper gives a geometric derivation of the differentiation formulas for *sinh* and *cosh*, analogous to the usual approach to the derivatives of sine and cosine. It is tentatively expected to appear this November.

UW-Oshkosh By John Beam

Ken Price has had a productive year. In January, the paper "Induced Good Gradings of Structural Matrix Rings," which Ken jointly authored with former UWO undergraduate student **John Dewitt**, appeared in Communications in Algebra. In April, Ken was elected as Chair-Elect for the Wisconsin Section of the MAA. And in July, he was a presenting member of a UW- System panel presentation on the Math Initiative at the 20th annual meeting of the Network for Continuous Change and Innovation in Denver, Colorado.

Other papers that have recently been accepted for publication include three contributions to an upcoming special edition of The Mathematics Enthusiast, coauthored in various combinations by **John Beam**, **Jason Belnap**, **Stephanie Bernander**, **Eric Kuennen**, **Amy Parrott**, **Carol Seaman** (formerly of UWO), and **Jen Szydlik**.

Jason and Amy have also contributed the article "Putting Technology in Its Place" for an upcoming issue of Mathematics Teacher. They are currently working on supporting preservice teachers' development of mathematical practices through the development of a form of standards-based grading and assessments in math content courses.

On September 14-15, **Joan Hart** attended The UW Madison AMS Fall Central Sectional Meeting, which she describes as "a great opportunity to enjoy math and the Terrace." She gave a talk in the Special Session on Topology and Descriptive Set Theory.

On September 27, UWO graduate **Jake Pichelmeyer** returned to our department to give a fantastic talk on the genera of knots in the complex projective plane. Jake is currently finishing a PhD program in mathematics at Kansas State University.

UW-Platteville By Benjamin V.C. Collins

The department welcomes new hire **Kevin Bombardier**. Kevin received his Ph.D. from the University of Iowa in May 2019 under the direction of **Dan Anderson**. His professional interests are in commutative ring theory and the scholarship of teaching and learning. Kevin is involved in amateur astronomy and likes to play board games in his free time.

Holly Attenborough, Michael S. Black, and Vicki Reuter were granted tenure and promoted to Associate Professor. **Dan Wackwitz** has received the 2018-2019 College of Engineering Mathematics and Science Excellence in Teaching Award.

Clem Jeske and **Dave Boyles** retired at the end of the spring semester, taking with them a combined 63 years of experience teaching at UW-Platteville. The Math Department congratulates them both on their well-earned retirements.

UW-Stout By Steve Deckelman

The department hired two new tenure track faculty, **Afroza Polin** in statistics, and **Michael Tetzlaff** in computer science.

Amitava Karmaker (computer science) was promoted to full professor.

Greg Bard's very well received book *Sage for Undergraduates* is being translated into Spanish.

The department is very excited to be hosting the 2020 state MAA meeting in April.

UW-Whitewater By Thomas Drucker

Balamurugan Pandiyan was coauthor of a paper published over the summer: **B. Pandiyan** and **S.J. Merrill**, A model of the cost of delaying treatment of Hashimoto's thyroiditis: thyroid cancer initiation and growth, Mathematical Biosciences and Engineering 16(6) 8069-8091 (2019) doi:10.3934/mbe.2019406.

Bala also received the best scientific poster award at the Society of Mathematical Viology in July, 2019. The poster title was "Avoiding the treatment of Hashimoto's thyroiditis: thyroid cancer initiation and growth."

The Department has taken on membership in the Intercollegiate Biomathematics Alliance (IBA).

Tom Drucker and **Xueqing Chen** organized special sessions at the American Mathematical Society sectional meeting in Madison in September. A number of faculty spoke at various sessions at the meeting.

MAA-Wisconsin Executive Committee

Representative to the MAA Congress	Clare Hemenway, UW-Stevens Point at Wausau
Chair	Kseniya Fuhrman, Milwaukee School of Engineering
Secretary-Treasurer	Jonathan Kane, UW-Madison
Chair-Elect	Ken Price, UW-Oshkosh
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