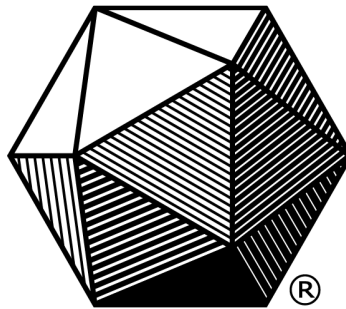


The Mathematical Association of America



Wisconsin Section Newsletter Fall 2010

Governor's Report

Considering that the world is still enduring the effects of the great recession, the MAA is doing impressively well financially. The organization experienced a \$226 thousand deficit in 2009, but the projected loss for 2010 is only \$37 thousand, and the projected loss for 2011 is only half of that. These deficits are not as scary when you realize that the MAA still has assets of over \$17 million not counting the equity in the headquarters buildings. The organization's \$6.5 million in investments are holding up in the uncertain financial markets because of the conservative nature of these investments. Membership dues revenue fell after the dues restructuring in 2007 but is now recovering. Surprisingly, revenues from MAA book sales are up this year, exemplified by the sales of MAA publications on Amazon.com which are up 30%. Summaries of the Treasurer's reports are available to all members at the MAA website at <http://maa.org> under *Governance Documents* on the *About Us* tab at the website.

An ambitious five-year \$2 million study entitled "Characteristics of Successful Programs in College Calculus" has begun this fall. The goals of the study are to understand the demographics of the student who take calculus, measure the impact of various characteristics of calculus classes that affect students' success, study successful programs, and ultimately help the MAA improve the calculus instruction across the country. It begins with a survey of hundreds of mathematics departments to identify what factors need to be measured in the rest of the study.

Have you taken advantage of the new electronic MAA memberships? For the price of a membership that receives printed copies of the American Mathematical Monthly, you can get an e-membership and receive all the MAA journals in an on-line format instead. This method of delivery of MAA journals is increasing in popularity since its introduction last fall with more than 2500 e-memberships. Beginning this fall all student memberships will be on-line. Currently, on-line journals are downloadable one article at a time, but the organization is looking into making it also possible to browse a journal cover-to-cover since many members prefer that method of access. Emeritus memberships, designed for long standing MAA members who are retired, used to have their annual memberships renewed automatically. The MAA is now going to require emeritus members to send a response to the organization each year to verify their continued interest in being members. The MAA tries hard to get current members to renew their memberships each year. I note that of the 29 MAA sections, the Wisconsin Section had the highest renewal rate for 2010 at 78.9%. About 12% of the Wisconsin Section members chose the e-membership option.

If you have not yet done so, you might want to check into the WeBWorK project at <http://webwork.maa.org>. This is an free on-line open source homework system.

If you want to keep in touch with the MAA on a more regular basis, you can connect with them on Facebook or Twitter and receive interesting mathematics reminders and updates on a daily basis. The expansion into social media has caused a 40% increase in the traffic to the MAA web site at <http://maa.org>.

Thanks to the donations collected at the section meeting in Oshkosh, the Wisconsin Section has ordered a "Wisconsin Section" brick for the Paul R. Halmos Commemorative Walk at the Carriage House Conference Center, part of the MAA's Headquarters in Washington, DC. The MAA is about to install another 100 bricks on the walk, and our Wisconsin Section brick will be one of them.

This is the last year of my three-year term as Governor of the Wisconsin Section. The MAA will conduct an election for a new governor early in 2011, so be watching for the election ballots and please participate.

Jonathan Kane, UW-Whitewater

Chair's Report

The 79th Annual Spring Meeting of the Wisconsin Section of the MAA will be held April 29-30, 2011 at UW-Stout. Chair-Elect Clare Hemenway has some spectacular speakers who have accepted her invitation, notably Ivars Peterson from MAA headquarters and Erik Demaine of MIT. Please consider adding to this program with a contributed talk of your own, as well as encouraging your students to give a talk. The talk application forms appear in this newsletter, and well-crafted talks about mathematics and mathematics teaching are always welcome. Face Off will once again be part of the program. Bring a team and watch your students compete for prestige and prizes!

Also at the 2011 Business Meeting (bright and early Saturday morning) we will be discussing and voting on extensive changes to the section bylaws. The executive committee has been working hard to suggest revisions that will make the bylaws current, both with section practices and national expectations. Look for notification in the spring regarding these changes, so you will have time to review them before the meeting.

The UW-Oshkosh faculty provided an excellent facility for our meeting April 16-17, 2010. Attendance was impressive, as were the numbers of faculty and student talks. There were 20 student talks as well as over 25 faculty talks. Some talks were so well attended, we were spilling into the hallways. Many thanks go to Steve and Jennifer Szydlak and other faculty for their hours of effort to make the meeting run smoothly and the many students recruited to help with registration and room-monitoring. Thanks to everyone who contributed to the meeting!

Nominations for the MAA Wisconsin Section Teaching Award are due November 1, 2010. I encourage all people with colleagues they admire to send in a nomination for this award. I promise it's easy to do!

Lastly, if you are interested in the position of chair of the section in the near future, please let me know.

Kristen Lampe, Carroll University

Volunteer to Help the Section

The Wisconsin Section invites nominations for the position of 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.

The section also seeks a director of Project NExT-Wisconsin. This position is responsible for recruiting new faculty for Project NExT-Wisconsin and for planning and directing all Project NExT-WI activities and programs.

Send nominations to Section Kristen Lampe at klampe@carrollu.edu. Self nominations are encouraged. Section officers must be members of the MAA.

Contest Report

American Mathematics Competitions

The AMC 8 competition was held on November 17, 2009. A total of 1,477 Wisconsin students participated in the competition down from 1,571 in 2008 and 1,976 in 2007. There were no perfect scores from Wisconsin. The average score for Wisconsin students was 9.43, compared with the national average score of 10.28. The next AMC 8 will be given November 16, 2010.

The AMC 10 and 12 contests were held on February 9 and 24, 2010. A total of 938 Wisconsin students took the AMC 10, and this number is slightly less than the 991 in 2009 and 996 in 2008. A total of 1,502 took the AMC 12, and this number is down from 1,554 in 2009 and 1,653 in 2008. Thus, a total of 2,440 students took the AMC 10/12, again slightly lower than last year. Of the Wisconsin students, 54 scored well enough to be invited to take the American Invitational Mathematics Examination (AIME). This number is slightly higher than the 50 in 2009, but still lower than earlier years; 56 in 2008 and 90 in 2007. There were no perfect scores from Wisconsin this year. The average score for Wisconsin students compared to the national average scores are in the following table:

	10A	10B	12A	12B
Wisconsin	65.8	59.1	59.3	53.1
National	70.8	68.3	62.5	59.8

One Wisconsin student qualified for the United States Mathematical Olympiad; Peter Wear of Madison West High School. The next AMC 10/12 will be given February 8 and 23, 2011.

MAA-Wisconsin Section High School Contest Examination

The Section contest examination was given on Thursday, December 3, 2009. There were 81 schools reporting scores this year for a total of 3,079 students. This is an increase from 71 schools in 2008. We had participation from 11 new schools this year. The difficulty level of the exam was suitable this year, and there were 12 perfect scores from 7 different schools. The cutoff for the top 1% was a score of 107 out of 120 this year. Congratulations to the students who received perfect scores (listed in the table below).

Alex Loiben	Homestead High School
Charles Z. He	Madison Memorial High School
Iris Xu	Madison Memorial High School
Valerie Shen	Madison Memorial High School
Suhas Kodali	Madison West High School
Tim Broman	Madison West High School
Connie Wang	Madison West High School
Justin Chan	Marquette University High School
Thomas Fehring	Marquette University High School
David Yarmulnik	Nicolet High School
Andy Alt	Port Washington High School
Minh-Tam Trinh	Whitefish Bay High School

We give thanks to the UW-Stout faculty for coordinating these efforts and to the test committee for writing the contest. UW-Stout's fifth and final year is 2010, therefore we will be transitioning to a new host Viterbo University in La Crosse for 2011-2016.

The contest winners in combined state contest and AMC scores were William Xiang from James Madison Memorial High School and Abraham Shin from Madison West High School. Congratulations to William and Abraham!

Laura Schmidt, UW-Stout

Project NExT-Wisconsin

The 2010 Fall Meeting of Project NExT-Wisconsin was held on Oct 2 – 3, 2010 at UW-Eau Claire, WI. Previously, the workshop was held in Menomonie, WI. However, due to an increase in price from previous meeting site, the NExT-WI director decided that it was time to change the venue. Dr. Simei Tong was a great help in reserving a room at UW-Eau Claire for the fall workshop. Due to this change we were able to keep the total individual cost to participants at the same level as the previous years.

Beth Chance and Allan Rossman from Cal Poly-San Luis Obispo led a workshop entitled "Teaching Introductory Statistics with Data, Activities, and Technology." In this workshop they presented, and engaged the participants in, the activities that can guide students to discover key statistical ideas and explore critical statistical concepts. Topics covered by these activities included data collection, data analysis, randomness, and statistical inference.

I, Irfan, am serving my second term as Project NExT-WI director. Next year is my last year for the current term. Even though I enjoy being the director of Project NExT-WI, I am willing to step aside for new blood. So I am asking all of the Project NExT-WI fellows to seriously consider becoming Project NExT-WI director. All you have to do is let me or MAA section chair, Kristen Lampe (klampe@carrollu.edu) know that you are interested in this position.

Project NExT-Wisconsin is open to all full-time faculty members in mathematics departments in the Wisconsin Section who are within their first five years of undergraduate teaching in Wisconsin. You may also be eligible if you have more teaching experience, but are new to the Wisconsin Section. There is no membership fee to join Project NExT-WI.

To apply, please contact Irfan Ul-Haq at ulhaqi@uwplatt.edu (application material is also assessable at <http://www.uwplatt.edu/nextwi/>).

Irfan Ul-Haq UW-Platteville

Student Activities

The co-Coordinator, Ken Price and Steve Szydlik, look forward to another year of promoting undergraduate activities in Wisconsin. The number of student participants and quality of their contributions to state events continues to be impressive. We hope you will encourage some of your students to attend conferences and possibly give talks.

Please mark November 5-6, 2010 on your calendars for the next Pi Mu Epsilon Regional Undergraduate Math Conference at St. Norbert College. This year's featured speaker is Judy Holdener of Kenyon College. She will present engaging undergraduate-level talks on "The Spiraling Art of Mollusks" and "Spiraling Integer Patterns via Painting."

The date for the spring 2011 section meeting is April 29-30, 2011. This year's meeting will be held at the University of Wisconsin-Stout. The banquet cost for students will continue to be held at \$5 per ticket. We were able to offer a student retreat room during the 2010 meeting at UW-Oshkosh and plan to do so again in 2011. At the 2010 meeting, there were 20 different student talks, with a total of 34 students involved in presenting. This compares favorably to 2009, when there were 18 talks given by a total of 23 students.

The Wisconsin Mathematics Council's Annual Green Lake Conference is scheduled for May 4-6, 2011. Anyone interested in any level of mathematics education in Wisconsin is encouraged to attend.

The fast-paced math game show "Face Off!" will return at both the Pi Mu Epsilon conference in November and also at the MAA section meeting in April. Students who have taken Calc I or above are eligible to compete for their department in teams of 2-4 players. With our "Slammer" buzzer system we can allow as many as ten teams to play. Contact Ken (pricek@uwosh.edu) or Steve (szydliks@uwosh.edu) for details on the event or to register your team. More information is available on the web site at http://www.uwosh.edu/faculty_staff/szydliks/faceoff.htm. You can also view pictures from previous years on Facebook's fan page for "Face Off! the math game show."

Ken Price and Steve Szydlik, UW-Oshkosh

Call for Nominations

The Wisconsin Section Distinguished Teaching Award was established in 1991. It stands as a concrete statement that mathematicians at the college and universities in Wisconsin place high importance on teaching. The Wisconsin Section is proud of its growing list of award recipients. These men and women of mathematics who have been recognized for their excellent work as teachers represent the commitment to teaching that exists among mathematicians throughout the state.

Nominations for the 2010 Wisconsin Section Distinguished Teaching Award are now being accepted. The nomination form and instructions are available for downloading as a pdf file on the MAA web site at <http://www.maa.org/awards/teachingawards.htm> or contact Mark R. Snavelly Mathematics Department, Carthage College, Kenosha, WI 53140. Nominations should be submitted so as to arrive by November 6, 2010.

CALL FOR SPEAKERS

79th Annual Meeting of MAA Wisconsin Section, April 29 – 30, 2011

University of Wisconsin-Stout

Talks of all kinds are welcome, particularly ones that are accessible to students, and we encourage talks by students. If you wish to present a talk at the Spring Meeting, please send the information below to Clare Hemenway (clare.hemenway@uwc.edu).

An on-line version of this form is available at:

<http://www.uwplatt.edu/maawisc/speaker.html>

(There is a separate form below for student speakers.)

SPEAKER RESPONSE FORM – DUE: March 25, 2011

Name: _____

Position: _____

Institution: _____

Address: _____

Phone: _____

Email: _____

Title of talk: _____

Length of talk: 25 minutes _____ or 50 minutes _____

Abstract: (Suggested length, 250 words or less.)

Check here if your talk is appropriate for students: _____

All rooms have a whiteboard, an opaque projector, and projector with a connection for a laptop computer. If you have other equipment needs, please describe them, and we will try to accommodate you.

Time preference: Friday afternoon is Imperative _____ Preferred _____

 Saturday morning is Imperative _____ Preferred _____

 Either time is acceptable _____

CALL FOR STUDENT SPEAKERS

Student Mathematics Conference

University of Wisconsin-Stout, April 29 – 30, 2011

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. Each presenting student receives free meeting registration. If you wish to present a talk, please complete the form below and send by March 25, 2011, to Clare Hemenway (clare.hemenway@uwc.edu).

An on-line version of this form is available at:

<http://www.uwplatt.edu/maawisc/student.html>

STUDENT SPEAKER RESPONSE FORM – DUE: MARCH 25, 2011

Name(s): _____

Institution: _____

Address: _____ Phone: _____

_____ Email: _____

Faculty Sponsor: _____

Title of presentation: _____

Brief description of presentation: (Suggested length, 250 words or less.)

All rooms have a whiteboard, an opaque projector, and projector with a connection for a laptop computer. If you have other equipment needs, please describe them, and we will try to accommodate you.

Time preference: Friday afternoon is Imperative _____ Preferred _____
 Saturday morning is Imperative _____ Preferred _____
 Either time is acceptable _____

Know Your Wisconsin Mathematician

Interview with Professor Ranjan Roy, Beloit College by J. Sriskandarajah, Madison College.

Tell us something about your education and how you got interested in mathematics.

I received my secondary education at an Irish Christian Brothers school in the hills of India. I had an excellent mathematics teacher, and a well-rounded education, including lots of sports.

After secondary school, I stayed at home with my parents for about eighteen months studying mathematics very intensively, working at least fourteen hours per day. My parents gave me great encouragement and practical and emotional support in my studies. I got my B.S. in mathematics, physics, and chemistry at Indian Institute of Technology, Kharagpur, West Bengal, where I had good teachers of mathematics. In spite of the fact that this was an engineering college, I got a liberal education at Kharagpur. I received my M.S. in mathematics at I.I.T Kanpur, U.P. where the math department was quite strong. At Stony Brook University on Long Island, NY, I studied under Irwin Kra and Bernard Maskit, students of Bers, and received my Ph.D. in 1973.

Where have you worked and how did you end up at Beloit College?

After receiving my Ph.D., I taught at the University of Kentucky for a short time. There, I collaborated with S.M. Shah and published many papers with him. Then I returned to India where I was first at I.I.T. Delhi and then at Himachal Pradesh University in Simla, in the hills.

Soon I received a fellowship at the Institute for Advanced Study in Simla where I was able to do my own research. In Simla I collaborated with Mihir Bannerjee in applied mathematics topics. After this two-year fellowship, I was appointed Reader at the Mathematics Institute at Punjab University in Chandigarh. After some time there, I returned to the U.S. and taught for two years at SUNY Plattsburgh. In 1982, I came to Beloit where I thought my opportunities for research would be better and where the students might be of a higher quality. I have been able to pursue my own work while at Beloit and I have also been able to collaborate with Richard Askey in Madison, as well as with mathematicians from farther away. I have enjoyed and still enjoy my colleagues, my students, and my teaching at Beloit.

What are your mathematical interests?

I am an analyst with an interest in the history of mathematics. I have done work in differential equations in the complex domain, Kleinian groups, fluid mechanics, and special functions. I published a book on special functions with Askey and George Andrews and I am almost finished with another, longer book on the development of mathematics. I also contributed to the NIST Handbook of Mathematical Functions, to appear very shortly.

What makes for a successful mathematics teacher?

First, a good teacher must know and love his subject and also care about his students. In addition, he should be aware of the background of the students and on that basis devote thought to how the material should be presented. One must try to show how a subject arises out of a small number of ideas and attempt to clearly reveal the interconnections among the ideas. A sense of humor and an organized approach are also helpful. Repetition is critical. One must repeat and review the material many times. Finally, one must somehow convince one's students that they will find enjoyment by devoting attention and hard work to the subject.

How has mathematics changed over the years?

This is a very broad question. I will discuss some aspects of mathematical notation and symbolism and how they have influenced the development of the subject. In the 1500s and early 1600s, very little abstract notation was used. To see this, one may read the original works of Cardano or Bombelli. Theorems and procedures were described largely in words, often accompanied by diagrams. Even as late as Pascal, we find that he stated important theorems completely in words. Starting with Viète, mathematical notation began to be more symbolic of the algebraic operations. Harriot and Descartes took giant steps in this area, so that their notation

is almost modern in form. This advance greatly facilitated the manipulation of algebraic variables and made mathematical calculation much more transparent. Thus, we may read with some ease the mathematical works written after 1650. To see this, one may study the original works of Wallis, van Schooten, or Newton.

Starting approximately in the nineteenth century, an abstract, noncomputational, and generalized approach began to grow, culminating in Hilbert's first proof of the existence of a finite basis for invariants. The abstract and existential nature of this result prompted Gordan to exclaim, "This is not mathematics; it is theology!" Ironically, Gordan's only student, the great Emmy Noether, became the mother of twentieth century abstract algebra. This trend, epitomized by Bourbaki and Grothendieck, overshadowed for some time the computational and algorithmic approach to mathematics. With the advent of the computer, we have a resurgence of interest in algorithms and formulas, so that even algebraic geometry was found to contain many interesting and important problems of a computational nature.

It appears to me that there have always been mathematicians who love to calculate and those who prefer to think in broad general terms. Naturally, to be a mathematician, one must do both, but one may lean one way or the other. For example, Fermat was a big idea man, with penetrating insights, and he was a sloppy calculator. By contrast, Stirling loved computation; he executed the prodigious task of computationally interpolating the factorial sequence 1, 1, 2, 6, 24, 120... to ten decimal places, finding that the midpoint value between the first two terms was .8862269251. He at once recognized this value as $\sqrt{\pi}/2$. Today, armed with powerful abstract theories accompanied by the computational facility of computers, both types of mathematicians can flourish.

What are your hobbies?

I spend most of my time doing or reading or teaching mathematics. I also read on a wide range of topics, including history and philosophy, and I like to play handball. In addition, I am an old movie buff and I enjoy walking and spending time with my friends and with my family.

Tell us something about your family.

My parents died long back, though my mother in law is still with us, and I have two brothers and their families. I have been married to Gretchen Carey for nearly forty years. She has a Ph.D. in philosophy from Stony Brook and she is very supportive of my work. We have a daughter and a son, both married to wonderful people, and they each have one child. My wife and I are happy grandparents.

Campus News

Beloit College

submitted by Ben Newton

Ranjan Roy is on sabbatical for the fall 2010 semester, putting the final touches on his much-anticipated book on the history of mathematics

In July, **Darrah Chavey** presented a paper at the 2010 Bridges Conference in Budapest, Hungary. His paper was entitled "Strip Symmetry Groups of African Sona Designs".

Ben Newton gave a talk entitled "Solvability Conditions for complex p-solvable linear groups" at the OSU-Denison Group Theory Conference in May.

Carroll University

submitted by Kristen Lampe

Heather Evans was invited to present at the Wisconsin Learning Assistance Network Conference (WLAN) Conference May 26, 2010 at UW-Platteville. The title of the workshop/presentation was "Supporting Developmental Mathematics: Math Study Skills, Anxiety, and Peer Support"

Madison College

submitted by J. Sriskandarajah

The Madison College Math Club continues to be active. Lectures for the academic year:

- **Lecture # 97, Friday, September 10, 3:30 PM**, Room 209 Professor Thomas Drucker, UW-W, *"Counting Bridges with Euler"*
- **Lecture # 98, Friday, October 1, 3:30 PM**, 3:30 PM, Room 209 Professor Norbert Kuenzi, UW-O *"A Historical Look at the Car-and-Goats Problem"*
- **Lecture # 99, Friday, October 29, 2010, 3:30 PM**, Room 209 [Professor Richard Brualdi](#), UW-Madison *"A Combinatorial Coloring Book"*
- **Lecture # 100, Friday, November 19, 2010, 3:30 PM**, Room 209 [Professor David Bressoud](#), Macalester College, MN and President, Mathematical Association of America *"Srinivasa Ramanujan, A Self-Taught Genius"*
- **Lecture # 101, Friday, December 3, 2010, 3:30 PM**, Room 209 Professor Steven Post, Edgewood College *"Liars, Truth tellers, and Infinite Dominoes"*
- **Lecture # 102, Friday, January 28, 2011, 3:30 PM**, Room TBD [Professor John A. Frohlinger](#), St. Norbert College *"The Shortest Distance is Along a Straight Line, Even When It's Not"*
- **Lecture # 103, Friday, February 25, 2011, 3:30 PM**, Room TBD [Professor Tim Pennings](#) of Hope College and his Welsh Corgi Elvis *"Do Dogs Know Calculus?"*
- **Lecture # 104, Friday, March 4, 2011, 3:30 PM**, Room TBD [Dr. James Swenson](#), [UW-Platteville](#) *"Power Rankings: Math for March Madness"*
- **Lecture # 105, Friday, April 8, 2011, 3:30 PM**, Room TBD [Professor Joseph Gallian](#), University of Minnesota and former President of the Mathematical Association of America *"Breaking Driver's License Codes"*

Further information is available at <http://clubs.matcmadison.edu/mathclub/>.

St. Norbert College

submitted by Katherine Muhs

Terry Jo Leiterman had an eventful year; she was awarded permanent tenure and gave birth to a daughter, Ruby Reagan, at the end of January! Ruby joins her two older brothers, Isaac (8) and Simon (5), in keeping Terry Jo and Brian quite busy.

Both **Teena Carroll** and **Kevin Murphy** have been selected to participate in the MAA's Project NEXt program.

Katherine Muhs continues to work with the Green Bay Area Public School District and the Wausaukee Public School District on increasing the elementary and middle school teacher's comfort and knowledge of the mathematics they are teaching. This is the third year of a three year MSP (Math/Science Partnership) grant funded by the U.S. Department of Education.

UW-Eau Claire

submitted by Simei Tong

Mohamed Elgindi has obtained a US patent. It was published by the US patent Office on September 8, 2010. The title is "Constant Shear Rate Extrusion Die".

Simei Tong, Mitch Phillipson (Texas A&M) and Isaac DeFrain (Kent State), submitted their research paper titled "Classifying Complemented Subspaces of $\mathcal{L}_p$ with Alspach Norm". It is a result of REU research project at UW-Eau Claire in the summer 2009.

This summer (2011) our department will host **the Summer Undergraduate Research Experience in Pure and Applied Mathematics** (SUREPAM) for the fourth year. It is an eight week program of concentrated mathematics research held on the UW-Eau Claire campus and is funded by the National Science Foundation. It supports ten undergraduate mathematics majors to do research in pure or applied mathematics with UW-Eau Claire professors. For further information of application please visit: www.uwec.edu/surepam.

Chris Ahrendt joined the UWEC Mathematics Faculty this Fall. He recently received his PhD from University of Nebraska Lincoln. His thesis is titled "Properties of the Generalized Laplace Transform and Transport Partial Dynamic Equation on Time Scales." He is already involving undergraduates in his research. His first project with undergraduates is titled "Analysis of Various Dynamic Equations on Time Scales". Chris is an MAA Project NeXT Fellow, and attended MathFest in Summer 2010. He will also be at the JMM in New Orleans this January.

Mark Bauer, a mathematics and business finance major from Spencer, received a paid internship at Sandia National Laboratories in Albuquerque, N.M, doing research for the U.S. Department of Homeland Security. He worked with other interns as well as with full-time Homeland Security researchers on a project related to system modeling and analysis.

Mark Bauer also received Kell Container Corp. Scholarship for student research scholarship. The scholarship supports a junior or senior who demonstrates outstanding ability in undergraduate research in collaboration with a faculty member. The faculty mentor for this scholarship is Dr. Simei Tong, who has worked with Mark for three projects over last two years. Here is the news release about the scholarship award <http://www.uwec.edu/newsreleases/10/may/0511KellContainerScholarship.htm>

Chelsey Drohman was awarded a prestigious scholarship (The sister Mary Petronia scholarship) from WMC, The Wisconsin Mathematics Council.

Nine math majors from UWEC who graduated in the spring of 2010 went on to graduate schools in mathematics, economics, computer sciences, and astronomy. Six of them are in Ph.D. programs.

UW-Milwaukee

submitted by Jay H. Beder

The first group of six students in the UWM and NSF supported program: Integrated Undergraduate Research in Aquatic Biology and Mathematical Sciences (UBM) successfully completed their first year of studies. In the summer the students worked intensively on three research projects in laboratories at the Department of Biological Sciences, and at the Great Lakes WATER Institute. Currently they are integrating their mathematical models and the data collected in the summer, and are getting ready to present their results at the Second Undergraduate Research Conference at the Interface of Biology and Mathematics in Knoxville, TN, in November. Our second cohort of nine students started the program in September. The students are mentored by faculty from Mathematical Sciences, Biological Sciences and researchers from the Great Lakes WATER Institute. A colorful report on the program can be found at: http://www4.uwm.edu/news/features/details.cfm?customel_datapageid_11602=3867792

Associate Professor **James E. Arnold, Jr.**, retired in May after 40 years at UWM. Jim came to the Department in August 1970 right after getting his degree in algebraic topology at UW-Madison under Edward Fadell. This was a time of antiwar protest, and as it happened he moved to Milwaukee the same

day Madison's Sterling Hall was bombed. The UWM Department moved into its present building the following semester, so that Jim has been the only person to have occupied office E443 (a prime, as he notes). Jim's research was in algebraic topology and algebra until recent years, when he co-authored several papers on robotics with several mechanical engineers. Aside from his own PhD students, he's been the minor professor for PhDs in physics and other areas. Many of his students have gone on to successful academic careers.

Together with one of his former students, he wrote a textbook (first printing in 2004) that has been used by the Department for Math 106, Contemporary Applications of Mathematics, and by thousands of students. As Jim says, "I hope that I've awakened an interest in Mathematics for these students as well as the many graduate students that I've taught and mentored over my 40 years at UWM."

UW-Oshkosh

submitted by John Beam

We were saddened this August when our colleague **Jean Peterson** passed away. Jean was a long-time member of our academic staff and a good friend of many of ours. On a happier note, we are pleased to welcome three new teachers to our academic staff: **Michelle Campbell**, **Mercedes Kriese**, and **Jeremy Parrott**.

Two of our faculty members received promotions: **Joan Hart** was promoted to Full Professor, and **Eric Kuennen** was promoted to Associate Professor.

We also won some awards! **Jen Szydlak** received a 2010 UW System Regents Teaching Excellence Award. She gave a great speech upon acceptance -- watch it for yourself at www.uwosh.edu/colsreports/faculty-notes/jennifer-szydlak

And one of our undergraduate students, **Liem Nguyen**, won an MAA Outstanding Presentation Award for her talk "Congruences for Partition Functions" in the Undergraduate Student Talk Sessions at MathFest this summer.

Ken Price has collaborated with faculty he met during his sabbatical at the Atlantic Algebra Center last year, to present "Matrix Structures from Directed Graphs" in a research seminar. He has also given conference presentations and seminar talks based on this research, at the 2010 Joint Meetings of the AMS and MAA and at St. Thomas University in Minnesota and Truman State University.

UW-Platteville

submitted by Julie McDonald

The department welcomes **Fernando Miranda-Mendoza** to a tenure track position. Fernando received his Ph.D. from Iowa State University in the area of Applied Mathematics under L. Steven Hou. Fernando is a 2010-2011 Project NExT fellow. Also joining the teaching staff this fall are **John Gillett** and **Jonas Meyer**.

Miyeon Kwon has been awarded tenure. **James Swenson** has been promoted to Associate Professor. Congratulations!

Irfan Ul-Haq is a 2010-2011 Wisconsin Teaching Fellow.

The department's Growth Agenda Grant has been renewed for the 2010-2011 school year. We continue to study the transition from high school to college mathematics.

UW-Stout

submitted by Steve Deckelman

The department welcomes new tenure track hire **Benjamin Jones**. Ben received his PhD at Notre Dame in algebra. Other new staff this fall include **Ayedean Bagdhassar**, **Amy Benedict**, **Krystle Mayer**, **Don Moskowitz**, and **Dennis Schmidt**. **John Hunt** and **Duane Poeschel** have also returned this fall. **Nelu Ghenciu** and **Laura Schmidt** received tenure and **Matt Horak** and **Terry Mason** were promoted to associate professor. **Radi Teleb** has retired. The department has moved from its long time haunt of Harvey Hall to the newly remodeled Jarvis Hall Science Wing and is excitedly preparing to host the spring 2011 MAA state meeting. The local organizing committee consists of **Eileen Zito**(chair), **Chris Bendel**, **Laura Schmidt**, **Wan Bae** and **Steve Deckelman**.

Congratulations to our colleague **Xueqing Chen** for being granted tenure and promotion to Associate Professor. Chen has published four papers:

- 1) H. Park, J. Lee, S. Choi, X. Chen, K. Nam, *Automorphisms Groups of Some Algebras*. Science in China Series A. Vol. 52, No. 2, 2009, 323-328.
- 2) X. Chen, T. Pospichal, K. Nam, *Quivers and Representations*, Handbook of Algebra (Vol. 6) Edited by Prof. Michiel Hazewinkel. Elsevier B.V., 2009, 507-561.
- 3) X. Chen, J. Lee, K. Nam, *Notes on a Semi-integral Domain*. Southeast Asian Bulletin of Mathematics. vol. 34, 2010, 59-68.
- 4) X. Chen, K. Nam, *Root Vectors and the Integral PBW-basis of the Composition Algebra of the Tame*. Contemporary Mathematics, vol. 506, AMS, Providence, RI, 2010, 83-104.

Chen presented his paper *Hall Algebras of Odd Periodic Triangulated Categories* at a Workshop on *QFT, String Theory & Mathematical Physics* in Kavli Institute for Theoretical Physics, China (KITPC). Chinese Academy of Sciences, July 19-Aug 6, 2010. Beijing, China.

Jonathan Kane attended the 2010 Math Fest of MAA and taught for three weeks at *AwesomeMath Summer Program*. He released Version 6 of *GRADE GUIDE*.

Ki-Bong Nam and **Seul Hee Choi** published their joint paper *Grade Stable Lie Algebras I*, in the Rocky Mountain Journal of Mathematics, Vol. 40, No. 3, 2010, 813--824. Ki-Bong gave a seminar talk on *Generalized Euler ph -function* at Hanyang Univ., Aug., 2010 and presented his paper *Automorphism group of a Witt type Lie algebra and Jacobian Conjecture* at the International Congress of Mathematicians (ICM) in Hyderabad, India, 2010. Nam is the co-author of a Linear Algebra textbook to be published by Kyungmoon-Sa, in Korea. The book will be released in March of 2011. ISBN: 978-89-6105-371-6.

Thomas Drucker spoke at the annual meeting of the Canadian Society for the History and Philosophy of Mathematics at Concordia University in Montreal in May on *Mathematics as a Liberal Art*. He also gave a talk to the Math Club at MATC in Madison on Friday the 10th of September on *Counting Bridges with Euler*.

Executive Committee 2010 – 2011

Governor	Jonathan Kane UW-Oshkosh	(262) 472-5002	kanej@uwv.edu
Chair	Kristen Lampe Carroll University	(262) 951-3036	klampe@carrollu.edu
Secretary-Treasurer	Mark Snavely Carthage College	(262) 551-5714	snavely@carthage.edu
Chair-Elect	Clare Hemenway UW-Marathon County	(715) 261-6253	clare.hemenway@uwv.edu
Immediate Past Chair	Robert Wilson UW-Madison	(608) 263-5944	wilson@math.wisc.edu
Math Contest Coordinator	Laura Schmidt UW-Stout	(715) 232-5017	schmidtla@uwstout.edu
Student Activities	Ken Price UW-Oshkosh	(920) 424-1057	pricek@uwosh.edu
	Steve Szydluk UW-Oshkosh	(920) 424-7346	szydluk@uwosh.edu
MAA Representative to the Wisconsin Math Council	Jennifer Kosiak	(608) 785-8385	kosiak.jenn@uwvax.edu
Project NExT Director	Irfan Ul-Haq UW-Platteville	(608) 342-1938	ulhaqi@uwplatt.edu
Public Information Officer	Benjamin Collins UW-Platteville	(608) 342-1746	collinbe@uwplatt.edu