# The Mathematical Association of America



# Wisconsin Section Newsletter Fall 2006

#### **Governor's Report**

The Meeting of the Board of Governors took place in Knoxville, Tennessee on August 9, 2006. MathFest was quite enjoyable and well attended.

The MAA hopes to help encourage and facilitate constructive discourse between mathematicians and mathematics educators in order to seek common ground in their mutual efforts to improve K-12 mathematics teaching and learning. More information can be found at <a href="http://www.maa.org/common-ground/">http://www.maa.org/common-ground/</a>. This site will serve as a repository for documents resulting from these efforts.

The MAA operates with a staff of 30 fulltime employees in Washington DC and 10 employees in Lincoln, Nebraska who work on the AMC (American Math Competitions). The MAA has been remodeling the Carriage House that is located behind the main office. This is in the Dupont Circle Area of Washington DC. Paul and Virginia Halmos contributed \$3 million toward the renovation of the facility that will be used for small conferences and meetings. It can be rented out to other organizations as well. Grand opening ceremonies are planned for Spring 2007.

Project NExT (New Experiences in Teaching), a professional development program for new or recent Ph.D.s in the mathematical sciences, remains strong. It addresses all aspects of an academic career and provides the participants with a network of peers and mentors as they assume these responsibilities. The Wisconsin Section has a total of 33 current and past NExT fellows. Applications for the 2007-2008 Fellows will be due sometime in April 2007.

The MAA sponsors the AMC exams and prepares students to compete in the International Math Olympiad. This past year the USA team placed fifth with two gold medals and 4 silver medals. The event was held in Ljubljana, Slovenia. The competition is quite stiff, and we are very proud of our team—some of whom will be back next year.

Hope to see many of you in New Orleans in January and in Eau Claire in April.

John Koker, UW Oshkosh

#### **Chair's Report**

Our seventy-fourth annual spring meeting, held on April 21-22 at the UW-Whitewater, was a great success. Thanks go to all the speakers, vendors, UW-Whitewater math faculty and special thanks to site coordinator, Julie Letellier, and our Public Information Officer, Ben Collins, for cooperating with me in putting together this wonderful program.

According to our Treasurer/Secretary, Andy Matchett, a total of 210 people – including 124 MAA members, 35 Two-Year college faculty, 102 Four-Year college faculty, 58 undergraduate students, 5 high school teachers and 6 officials from businesses/industries and government – attended this event, setting an attendance record. The program consisted of six invited speakers, 32 non-student contributed papers, fifteen of which were contributed by women. Among the student submissions, there were seven undergraduate, three from women, and among the ten panelists there were six women.

Robert Calcaterra of UW-Platteville and four area high school teachers were recognized and received section awards for distinguished teaching. Andy Matchett's more than twenty years of service to our section was recognized, and he was honored with a service plaque. The banquet address was given by Tom Banchoff (Brown University, on leave at the University of Georgia) on "The Dali Dimension" and was enjoyed by all.

The other interesting talks which I attended were:

- "Where does the AHA come from?" and "Having your cake and eating it too," by the Polya Lecturer, Steven Rudich (Carnegie Mellon University)
- "Number Theory of Partitions: The Legacy of Euler, Ramanujan and Dyson," Ken Ono (UW-Madison)
- "Do Dogs Know Calculus?", Tim Pennings (Hope College, MI)

- "A historical view of curriculum in mathematics," Walter Meyer (Adelphi University)
- "John Wallis and his influence on Newton and Euler," Ranjan Roy (Beloit College)
- "Simple Chaotic Systems and Circuits," Clint Sprott (UW-Madison)
- "Examinations for teachers in the 19<sup>th</sup> century," Richard Askey (UW-Madison)
- "Mathematical questions inspired by research in Biological Intelligence," Amir Assadi (UW-Madison)
- "Favorable Numb3rs," Paul Campbell (Beloit College)

For entertainment, there was "Face Off", a math game show for college students, which was a big hit, presented by the UW-Oshkosh math faculty John Koker, Ken Price and Steve Szydlik. Students of Madison East High School, under the guidance of their math teacher Cynthia Chin, presented a musical, "Fermat's Last Tango," which was well received by the audience.

We welcome aboard Mohammad Ahmadi as our chair-elect and Mark Snavely as our secretary/treasurer. Mohammad has already found two speakers for our 75<sup>th</sup> annual spring meeting, scheduled for April 20-21, 2007 at the UW-Eau Claire.

I represented our section at the MAA's section officers meeting held on Thursday, August 10, 2006 in conjunction with the MathFest at Knoxville, TN. There was a discussion on the process of amending the section bylaws. The details of this can be found on line soon. Nancy Hagelgans, Chair of the Committee on sections, mentioned that all the annual section reports are available on the MAA online at <a href="https://www.maa.org">www.maa.org</a>. Also at that site you may find guidelines for section officers and information on Polya Lecturers, Guest Speakers list, etc. The contact person is Hal Nesbitt (<a href="https://mea.org">hnesbitt@maa.org</a>), the MAA Program Coordinator.

David Stone, member of the Strategic Planning Working Group of Governors, mentioned that his group concentrates on two or three topics in small groups annually. This year's topics are governance and student activities. The break-out session to which I was assigned discussed the following questions:

- What is the relationship between your section and the national organization?
- How could MAA's governance be changed to facilitate better communicate between your section and the national organization?
- How are issues related to math (especially at the undergraduate level) identified and prioritized by MAA now?
- What changes in the administrative structure of the MAA would encourage and accommodate more involvement of the section in the broad issues to be addressed by the national organization?
- What should be the purpose and goal of the section officers meeting?

Again, group responses to all these questions will be available online shortly. I took the opportunity to thank MAA for funding the Polya lecturer, Project NExT, and also for funding the expenses of one section member to attend this meeting.

Beginning this newsletter, you will find a new column called "Know Your Wisconsin Mathematician". This is one way of honoring our retirees. Based on teaching, research and service to the mathematical community, we have chosen Professor Norbert Kuenzi of UW-Oshkosh, as our first candidate for this new column. Enjoy reading.

At the executive committee meeting of the MAA(WI), held on September 29, at the MATC (Truax), the committee voted to increase the MAA (WI) contest prize money to \$600. The prize money remained at \$500 for more than a decade.

I conclude my report by thanking the executive committee for all their support and offer special thanks to David Scott, Jayanthi Ganapathy, and Andy Matchett in guiding me throughout this journey.

J. Sriskandarajah Madison Area Technical College

#### 2006 Wisconsin Section Teaching Award

Edited from the presentation speech by Andrew Matchett, available at http://henry.carthage.edu/faculty/msnavely/maa/maaarchives/mtg06.htm

The 2006 award for distinguished college or university mathematics teaching goes to Robert Calcaterra of UW-Platteville. Rob received his Ph.D. at the University of Wisconsin-Madison in 1983 under the direction of Steve Baumann. He began that year teaching at UWP, and 2006 marks the end of his 23<sup>rd</sup> year in Platteville.

Rob was nominated for the distinguished teaching award by the chair of his department, who wrote. "Dr Calcaterra has high standards and makes his students work very hard, but they seem to really appreciate it. His students continually comment on his enthusiasm toward teaching mathematics, his ability to make hard things simple, and his support and interest in their academic development."

Another colleague says this: "Rob is not an entertainer. He does not do magic tricks or sing the digits of  $\pi$ . He is not constantly chasing after the newest trends in classroom management or alternative assessment. He has an old fashioned style and does a terrific job of teaching."

One of his students writes: "What sets Dr. Calcaterra apart from others is his supreme intelligence and his ability to challenge his students." Another says, "The first word that comes to mind when I think of Dr. Calcaterra is genius. In the same breath, I also think humble, for I guarantee you will never hear him admit to his superior intelligence."

And the comments go on and on like this. It is very clear that Rob is indeed a very gifted teacher. And therefore it is highly appropriate to honor him with the Wisconsin Section distinguished teaching award.

#### **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 2007 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. Snavely Mathematics Department, Carthage College, Kenosha, WI 53140. Nominations should be submitted so as to arrive by November 1, 2006.

#### **Contest Report**

#### **American Mathematics Competitions**

The AMC 8 competition was held on November 15, 2005. A total of 2760 Wisconsin students participated in the competition (down from 3111). As was the case in the previous four years, no Wisconsin students scored perfect papers. The average score for Wisconsin students was 8.89, compared with the national average score of 9.835. This is a slightly narrower gap than last year. The next AMC 8 will be held on November 15, 2005.

The AMC 10 and 12 contests were held on January 31 and February 16, 2006. A total of 917 Wisconsin students took the AMC 10, and 1,616 took the AMC 12, for a total of 2,533 overall. This number is down from the 2,765 taking the exams in 2005, but up from 2,288 in 2004. Of the Wisconsin students, 269 scored well enough to be invited to take the American Invitational Mathematics Examination (AIME). This number is up from 205 in 2005 and 202 in 2004. 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	77.4	67.1	84.1	84.8
National	79	68.5	85.7	85.5

Three Wisconsin students qualified for the United States Mathematical Olympiad: Timothy Black of James Madison Memorial High School, and Andrew Ishihara and Andy Martin of Marquette University High School.

The next AMC 10 and 12 will be given February 6 and February 21, 2007.

#### **MAA-Wisconsin Section High School Contest Examination**

The Section contest examination was given on Thursday, December 1, 2005. There were 4887 high school students' scores reported from approximately 90 schools. This year, there were 3 perfect scores reported (down from 24 last year), Nick Wage, Timothy Black, and Andrew Bolanowski. The cutoff score for the top 1% was 82 out of 120.

Dr. Laura Schmidt and the UW-Stout faculty are on their way for hosting the Fall 2006 contest. On September 1, 2006, department liaisons (hopefully) received Dr. Schmidt's e-mail inviting those interested to participate in the writing of the exam.

#### **MAA-Wisconsin Section Contest Prizes**

The two students with the highest combined scores for the AMC-10/12 and MAA-Wisconsin contests are awarded prizes each year in recognition for their achievement. Timothy Black of James Madison Memorial HS had the highest combined score, followed by Andrew Bolanowski of Rufus King HS in Milwaukee. The section congratulates both for their outstanding performances.

Respectfully submitted, Kristen Lampe Carroll College

#### **Project NExT-Wisconsin**

The Fall Meeting of Project NExT-Wisconsin was quite successful. David M. Bressoud of Macalester College in St. Paul, MN, led a workshop entitled "Engaging Mathematics, for our students and for us." David presented convincing arguments how one can use projects not only to involve students in learning the material at hand (in math) but to create their interest in the subject. David talked about the issues involved in giving projects. For example: How much guidance should be given to the students? How do we balance group work and individual effort? What are we looking for as we critique student answers? He is a great speaker, and he made a terrific case. He talked about his involvement and experience in the "calculus reform" concept and discussed the AP calculus exam. The workshop was held from Oct 5 to Oct 7, 2006 at "Olde Towne" and participants stayed at a local hotel in Menomonie, WI.

The possible topics for the "Spring Panel Discussion" were discussed at the workshop. Further details will be posted in time on the Project NExT-WI website (http://www.uwplatt.edu/nextwi/). Also, there is interest in putting together a "Discussion Board" for the Project NExT-WI. This year 9 new participants joined Project NExT-WI section. The current membership is holding at 30.

There is a list of Project NExTers on NExT-WI web-page who are willing to give a talk suitable for the faculty OR the general undergraduate audience. You may invite us to come for a math club, colloquium, or whatever.

Project NExT-Wisconsin is open to all full-time faculty members in mathematics departments in the Wisconsin Section who are within their first four years of undergraduate teaching. 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 me at ulhaqi@uwplatt.edu (application material is accessable at http://www.uwplatt.edu/nextwi/).

Respectfully, Irfan Ul-haq Director, Project NExT-Wisconsin

#### Student Activities

The co-Coordinators, Ken Price and Steve Szydlik, are looking forward to another year 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.

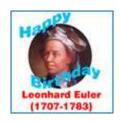
Please mark November 3-4, 2006 on your calendars for the next Pi Mu Epsilon Regional Undergraduate Math Conference at St. Norbert College. This year's featured speaker is Underwood Dudley, Professor Emeritus at Depauw University. He will present engaging undergraduate-level talks on "Angle Trisectors" and "Formulas for Primes."

The date for the spring 2007 section meeting is April 20-21, 2007. This year's meeting will be held at the University of Wisconsin-Eau Claire. Let your students know they can receive a complimentary one-year MAA membership simply by giving a talk at this meeting. The banquet cost for students will continue to be held at \$5 per ticket. We will try to find low-cost housing options for students who wish to stay for both days. Thanks to the hard work of the organizers of the 2006 meeting, we were able to offer a student retreat room at UW-Whitewater, and plan to do so again in 2007.

The Wisconsin Mathematics Council's Annual Green Lake Conference is scheduled for May 3-4, 2007. 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 at either conference. You can expect questions to come from the broad realm of mathematics. And we do mean *broad!* Categories might include: Chances Are..., Log Jam, Name That Theorem, Off Limits, or Quick Trigger. Expect some serious fun! Contact Ken (<u>pricek@uwosh.edu</u>) or Steve (<u>szydliks@uwosh.edu</u>), or check the "Face Off" web site at <a href="http://www.uwosh.edu/departments/mathematics/mathclub/faceoff.htm">http://www.uwosh.edu/departments/mathematics/mathclub/faceoff.htm</a> for more details.

Respectfully submitted by Ken Price and Steve Szydlik, UW-Oshkosh



#### Euler – 300 Celebration of Leonhard Euler's 300<sup>th</sup> Birthday

 $75^{th}$  Annual Meeting of MAA/Wisconsin Section, April 20 – 21, 2007 University of Wisconsin - Eau Claire

#### **CALL FOR SPEAKERS**

The Wisconsin Section of the MAA will hold its 2007 Spring Meeting at UW-Eau Claire on April 20-21, 2007. The year 2007 marks the 300<sup>th</sup> birthday of Euler and we anticipate to have a great meeting in Eau Claire. Please consider giving a talk about your work in mathematics, an issue concerned with mathematics education, or pedagogy of mathematics. Talks related to the work of Euler are especially welcome. Please encourage your mathematics students to attend the meeting and to give a presentation. There is a student speaker form below.

If you wish to present a talk at the Spring Meeting, please send the information below to:

Mohammad H. Ahmadi, Department of Mathematical and Computer Sciences, UW-Whitewater, WI 53190

Phone: (262) 472 – 5175 FAX: (262) 472 – 1372 email: ahmadim@uww.edu

An on-line version of this form is available at: http://www.uwplatt.edu/maawisc/speaker.html

Electronic submission of the information and abstract is preferred.

SPEAKER RESPONS	E FORM – DUE: JANUA	RY 19, 2007	
Name:			
Institution:			
Address:			
Phone:			
Title of talk:			
Length of talk: 25 r	ninutes	or 50 minutes	
Abstract:			
Check here if your talk	is appropriate for students	s:	
Equipment needed:			
Time preference:	Friday afternoon is	imperative	Preferred
	Saturday afternoon is	imperative	Preferred
	Fither time is acceptal	hle	

Student Mathematics Conference

University of Wisconsin - Eau Claire, April 20 - 21, 2007

#### CALL FOR 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. Each student speaker receives free registration at the meeting and free one year MAA membership. If you wish to present a talk, please send the completed form below or an email equivalent by March 16, 2007 to:

Mohammad H. Ahmadi, Department of Mathematical and Computer Sciences, UW-Whitewater, WI 53190

Phone: (262) 472 – 5175 FAX: (262) 472 – 1372 email: ahmadim@uww.edu

An on-line version of this form is available at: <a href="http://www.uwplatt.edu/maawisc/student.html">http://www.uwplatt.edu/maawisc/student.html</a>

Electronic submission of the information and abstract is preferred.

STUDENT SPEAKER	RESPONSE FORM – DU	JE: MARCH 16, 200	7	
Name:		Year in School	Year in School	
Institution:				
Address:		Phone:		
		Email:		
Faculty Sponsor:				
Title of presentation: _				
Brief description of pre	esentation			
Equipment needed:				
Time preference:	Friday afternoon is	imperative	Preferred	
	Saturday afternoon is	imperative	Preferred	
	Either time is acceptab	ole		

# Minutes of the Business Meeting April 12, 2006, UW-Whitewater

1. The meeting was called to order at 8:10 by Section Chair David Scott. David thanked our hosts at UW-Whitewater, and Sri for an excellent meeting.

Ben Collins, UW-Platteville, will take over for Aaron Trautwein as Public Information officer and Liaison Coordinator. Ben has agreed to add these jobs to the job of Newsletter Editor, taking over from Kathy Muhs, St. Norbert College, when her term expires in April, 2006. Irfan Ul-Haq of UW-Platteville will replace Ben Collins as director of Project NExT Wisconsin. Ken Price and Steve Szydlik, both of UW-Oshkosh, will begin a shared three-year term as joint Coordinators of Student Activities.

- 2. The minutes of the business meeting of April, 2005, and the current treasurer's report were approved. The treasurer pointed out particularly the striking drop in the cost of the Newsletter since we moved to web-based publishing. He also noted that the section has a certificate of deposit coming due in May.
- 3. John Koker presented his Governor's report, and took the opportunity to encourage members to attend Mathfest in Knoxville. John reported that the MAA is still wrestling with the issue of restructuring the dues schedule. He also thanked Jayanthi for her three years of service on the Executive Committee as Chair-Elect, Chair, and Past Chair.
- 4. Mohammad Ahmadi from UW-Whitewater was elected Chair-Elect of the section.
- 5. Mark Snavely from Carthage College was elected Secretary-Treasurer of the section. He will serve a three year term. Everyone thanked Andy Matchett for his distinguished service as Secretary-Treasurer.
- 6. The Spring Meeting for 2007 will be at UW-Eau Claire, April 20-21. In 2008, we will meet at MATC (Madison). UW-Oshkosh postponed hosting the meeting until a building project is complete. UW-Marshfield also extended an invitation for a future meeting.
- 7. Kathy Muhs reported that a brief newsletter was sent to section members, with the complete newsletter available online. Postcards were sent to other section editors. It was noted that during Kathy Muhs' term as editor, we moved from exclusively paper records to online communication in a smooth, reasonable way. Thank you, Kathy!
- 8. This was the final year for Edgewood to host the mathematics contests. Many thanks were given for their efforts. Three perfect scores (Nick Wage, Timothy Black, and Andrew Bolanowski) were recorded on the MAA-Wisconsin Section High School Contest Examination, down from 24 last year. UW-Stout, with Laura Schmidt as the primary contact, will take over running the contests next year.
- 9. John Koker reported on Face-Off. Ken Price and Steve Szydlik did a fantastic job setting up the game show, and they are willing to do it again next year. Send potential game show questions to Ken Price at UW-Oshkosh. Representatives from UW-Platteville noted that their team won this year. Representative from St. Norbert College immediately asked which team finished second. The possibility of opening the contest to high school students or graduate students was discussed.
- 10. Project NExT encourages new faculty to join Wisconsin-NExT. The speaker for the fall workshop (October 5-7) in Menomonie is David Bressoud.
- 11. Representative from UW-Eau Claire request any suggestions and advice for hosting a meeting. Ben Collins will collect suggestions for future use.
- 12. Some schools do not have an MAA Liaison. Ben continues to recruit and pursue representative at those schools.
- 13. Thanks were again issued to our hosts at UW-Whitewater for a job well done.
- 14. The meeting adjourned at 8:45 a.m.

Respectfully submitted, Mark Snavely, Secretary/Treasurer

#### **Know Your Wisconsin Mathematician**

Interview with Professor Norbert Kuenzi, by Professor Steve Szydlik

## What impression did grade school have on you mathematically? Was that where you became interested in mathematics?

I don't have any special recollection of grade school math. In ninth grade I recall that I could get algebra faster than most of my classmates.

#### Was there a time in your life when you discovered that mathematics was what you wanted to do?

During the second semester of my freshman year in college I decided that I wanted to become a high school mathematics teacher(1953-54). I received an Achievement Award for Freshmen Mathematics 1953-54 at Wisconsin State College. The award was a copy of the C.R.C. Standard Mathematical Tables.

#### What town did you grow up in?

I grew up in Beaver Dam, Wisconsin.

#### And your undergraduate school and major was?

I attended Wisconsin State College in Eau Claire, 1953-55 and 1957-59. I graduated in 1959 with mathematics major and a minor in physics.

#### After graduation you went to Madison?

When I graduated I took a high school teaching position in Clinton, Wisconsin. I taught high school mathematics and physics at Clinton High School 1959-62. I began working on a Masters degree at the University of Wisconsin during the summers of 1960 and 1961.

I applied for a National Science Foundation program for mathematics teachers held at the University of Illinois. I was accepted into the program. I resigned my teaching position and began graduate work at Illinois in June 1962. I received a Masters Degree in Mathematics from Illinois.

#### How did you end up at UW-Oshkosh?

While at Illinois I met Bob Wonders of UW- Oshkosh. He offered me a teaching position at UW-O. I accepted and began teaching mathematics in 1964. At that time there were no PhD's in the department. In 1965 there was one PhD in the department.

## When you said you had to go back to get a PhD, was that an internal compulsion, or did someone tell you that you needed to? And you got your PhD from Madison?

I was encouraged by the department to pursue a PhD.

In June of 1966 I enrolled at the University of Iowa and I received my PhD from Iowa in August of 1969. I do *not* have any degree from Madison.

#### When were you and Barb married? And how about your children? When did they come along?

I married Barbara in February, 1960 our children are Michael (Dec. 1960), Daniel (Nov. 1961), Amy (May 1964), Peter (May 1966), and Angela (April 1969).

#### Over the years, did you notice a big change in the University/University community?

When I started at Oshkosh the school was growing rapidly. Many new faculty were hired each year. Many students were first generation college students. Some administrators thought that the size of the student body would continue to grow linearly. However, Student enrollment reached a peak in the early 1970's. The department and university were overstaffed. Some non-tenured faculty were not retained. In some departments tenured faculty were released. There were no new hires. Faculty mobility was very limited. Faculty morale was low during the early to mid 70's.

#### Over the years, did you find that the teaching of mathematics has changed?

The teaching of mathematics has changed significantly. There were no calculators or computers available when I started. Graphing functions, working with large data sets, and computations were time consuming and not easily done. Today faculty and students have powerful tools at their disposal.

#### Did your expectations for the students change ability-wise or activity-wise over the years?

I always had high expectations for my students.

#### As for your own professional career, what areas of mathematics did you study?

In graduate school I had a good dose of algebra, analysis, topology, probability, mathematical statistics. I have also studied combinatorics, discrete math, and probability & statistics paradoxes informally.

#### In all your years at Oshkosh, did you work at research in probability?

I did limited research in probability.

#### How long were you department chair?

I was the department chair for fifteen years, 1976-91.

# When I think back to your career, a couple of things really jump out at me: your work with math competitions and cryptarithms. Can you tell me about that?

Sometime in the 70's I started writing and choosing questions for the Wisconsin Section High School Contest. Bob Prielipp got me involved with the Contest. I continued to work on the contest until 2004. For the past ten years I have worked on the AMC 8 (formerly the American Junior High School Math Exam.).

From 1976 till 1986 Bob Prielipp and I were the editors of the "Problem Department" of the journal *School Science and Mathematics*. In 1979 Bob and I put together a booklet for SSMA entitled *Cryptarithms and Other Arithmetical Pastimes*.

#### What do you think does make a good problem? What makes a good solution?

A good problem is one that can be simply stated, and catches your interest. You don't immediately know how to attack it, but it leads to other interesting ideas and questions.

A good solution is one that shows insight into the problem—one that avoids getting bogged down in computations and/or symbolic manipulations.

#### Do you have an all-time favorite problem?

I have several favorite types of problems. Examples: Probability problems with surprising answers such as "car and goats", "three way duel", "variations of the birthday problem", "variations of Simpson's Paradox", "monkey, sailors, & coconuts"; "Binary Curiosities"; I could go on and on.

# What do you think is the best part of mathematics and being a mathematician? How about the worst part?

Mathematics is a field with unlimited questions. There are countless "elementary" questions one can work on and explore. No matter how sophisticated or unsophisticated your math background, there are unlimited challenges for you to pursue. Of course there are questions of a highly technical nature for those with advanced specialized training to pursue.

#### What does your wife think of mathematics?

She doesn't spend much time thinking about mathematics. She puts up with me.

#### Are you more practically minded or more given to the imagination?

I don't know the answer. I'm probably somewhere in between.

#### How about your family, your kids? Did any of them show any promise in mathematics?

I encouraged them to take all the mathematics that they could. However, none of them had or developed a passion for mathematics.

#### What was UW Oshkosh called originally?

I am not sure what UW Oshkosh was originally called. I do know it was called Wisconsin State Teachers College, Wisconsin State College, Wisconsin State University, and University of Wisconsin.

#### How would you describe what you do to someone outside your field?

I'm retired. When I was working I told them "I teach all kinds of mathematics courses ranging from very elementary to advanced undergraduate, I try to learn something new in every class I teach, I try to solve problems, I try to create good problems, I try to have fun doing so.

#### **Campus News**

Alverno College

submitted by Susan F. Pustejovsky

Lois Kailhofer has been promoted to Associate Professor of Mathematics.

Lois presented an invited paper at the Spring Topology Conference last spring semester.

**Susan Pustejovsky** contributed a chapter "Assessment in Mathematics: A Collegial Effort" to a book to appear in Fall 2006: *Assessment of Student Learning in College Mathematics: Towards Improved Programs and Courses*, edited by Bernard L. Madison, a publication of AIR (Association for Instutional Research).

**Karen Corlyn**, a teacher in the Milwaukee Public Schools, taught Mathematics for Elementary Teachers at Alverno College in spring and summer 2006.

The Computer Science program has recently changed its name; the new name of our major is Computing and Information Technology.

Beloit College

submitted by Paul J. Campbell

**Ben Newton** (B.S. Carleton College (physics), M.A. and Ph.D. University of Wisconsin (group theory with minor in CS)) has joined the department on tenure track, after extensive teaching experience as a TA, including the "Excellence in Teaching" award in 2005 and participation in the Wisconsin Emerging Scholars Program.

Dave Ellis is on sabbatical for the year.

Carroll College

submitted by Kristen A. Lampe

The mathematics faculty at Carroll College are pleased to welcome **Heather Evans** as a full-time instructor. Heather joins us as our developmental mathematics specialist.

We are a bit sad to announce the retirement of **Dr. Linda Thompson** in May, 2007. Dr. Thompson leaves us after 26 years of wonderful contributions to the mathematics program and the college.

Concordia University Wisconsin

submitted by Jon Baum

**Nicole Muth** has joined the faculty at Concordia University. She teaches mainly Mathematics education courses. She was previously at Lakeshore Technical Institute.

Lawrence University

submitted by Alan Parks

Associate Professor **Joy Jordan** was chosen for the Waller Education Award given by the American Statistical Association.

Visiting Assistant Professor **Matthew Jackson** has joined us on a two-year appointment. Matthew comes from the University of Pittsburgh and will teach a variety of courses including advanced logic.

The department's weekly faculty-student tea features informal conversation and goodies, an occasional speaker, and bad math jokes.

Fall Math Club Events:

Friday, Sept. 29, 9 AM, Mitby Theater, "Mathematics: The Language of the Universe", Prof. James Reardon, UW-Madison, Dept. of Physics

10:30 - Noon "Face Off", a math jeorpady presented by Prof. Kenneth Price and Steve Szydlik of UW-O and Prof. Ben Collins of UW- Platteville, for 16 middle school math teams.

Friday, Oct. 20, "The Da Vinci Code", Prof. Gary Britton, UWC-Washington County, #321, 3:30 PM (Monthly Presentation #55)

Monday, Nov. 13, "Rational Approximations to Irrational Numbers", Prof. Anthony Thomas, UW-Platteville, #321, 3:30 PM (Presentation #56)

Monday, Dec 4, "Using Mathematics to Understand Molecules", Prof. Julie Mitchell, UW-Madison, #321, 3:30 PM (Presentation #57)

Further information is available at <a href="http://matcmadison.edu/studentlife/clubs/mathclub">http://matcmadison.edu/studentlife/clubs/mathclub</a>

#### St. Norbert College

submitted by Rick Poss

**Gene De Both** retired after forty years of teaching. His focus was teaching the applied mathematics courses, especially Numerical Analysis, Probability and Statistics, and Operations Research. During his early years at SNC, he helped introduce computer programming to the curriculum.

For the first time since 1983, the mathematics discipline hired a new full time member. **Terry Jo Leiterman** joins the department after receiving her doctorate from UNC – Chapel Hill. Terry Jo is a native of Wisconsin and received her undergraduate degree from UW – Oshkosh. Her specialty is applied math, with special emphasis on Mathematical Biology. This summer she was selected for the national Project NExT program. She will take an active role in advising the math club at St. Norbert College.

St. Norbert College received a \$1500 renewal of the MAA-NSF grant supporting regional undergraduate mathematics conferences. This year's conference will be held November 3-4. The featured speaker is **Woody Dudley**.

#### **UW-Milwaukee**

submitted by Jay H. Beder

The Department saw three new hires, two retirements, three promotions, a UWM teaching award, and a 6-figure winner on Jeopardy.

Assistant Professor **Suzanne Hruska** joined the Department in August. She studies dynamical systems of several complex variables, often incorporating computer-assisted proof techniques. She received her PhD in Mathematics from Cornell University in 2002, and held post-docs at SUNY Stony Brook 2002—2003 and at Indiana University 2003—2006.

Assistant Professor Christopher Hruska also joined the Department in August. His current area of research is geometric group theory, with an emphasis on hyperbolic and relatively hyperbolic groups. Prior to joining the Department he spent four years at the University of Chicago as an L.E. Dickson Instructor of mathematics (2002-2006) and also as an NSF postdoctoral fellow (2002-2005). Dr. Hruska received his Ph.D. in mathematics from Cornell University in 2002. He has been married to Suzanne Hruska since June of 2000, and they have a toddler son Benjamin, born in April of 2005. All 3 are happy to be living together in Milwaukee, and have already bought a house and are settling in quite nicely!

Professor **David H. Schultz** retired January 1, 2006 after 35 1/2 years at UWM. He received his Ph.D. in Numerical Analysis in 1970 at UW-Madison and came to UWM in the fall of 1970. He served as Associate Chair in 1996-97 and was Chair from 1997 to 2001. He also served on almost every major standing committee at UWM, including a term on the University Committee and another as President Pro Tem of the faculty senate, averaging almost 10 committees a year. Professor Schultz has published numerous research papers in numerical analysis and has directed 8 Ph.D. theses and 4 MS

theses. He has also helped developed several departmental programs, such as that in Industrial Mathematics. In 1998 Professor Schultz was an invited speaker at the International IMAC Conference on Scientific Computations and Mathematical Modeling held in Alicante, Spain, and was co-chairman of the following conference held at UWM May 25-27, 2000. He was co-editor of the conference proceedings, and has been on the editorial board of the *International Journal of Applied Science & Computations* for many years.

Professor **Cheng Ming Lee** retired in May 2006 after many years at UWM. His area of expertise is real analysis. Biographical information was not available for inclusion as this went to press.

Professor **Paul Roebber** was a recipient of the 2005-06 UWM Distinguished Undergraduate Teaching Award. He is the third member of the Department to be so recognized. Information is on-line at <a href="http://www.uwm.edu/News/Features/06.10/Awards-Fall06.html">http://www.uwm.edu/News/Features/06.10/Awards-Fall06.html</a> (scroll down).

**Bruce Wade** and **Jay Beder** were promoted to Full Professor, and **Vince Larson** to Associate Professor, as of August 2006.

Finally, **Michael Falk**, a UWM research meteorologist in the Atmospheric Sciences lab of Associate Professor Vince Larson, won \$250,000 in the "Jeopardy Tournament of Champions" that aired in May. He also took home more than \$59,000 in a four-day stint on the show in April. Representatives from WDJT-TV, Channel 58, the Milwaukee CBS affiliate that broadcasts the game show, threw him a surprise party on campus to formally acknowledge his accomplishments. You may view Falk's stats at <a href="http://www.j-archive.com/showplayerstats.php?player\_id=1804">http://www.j-archive.com/showplayerstats.php?player\_id=1804</a> and Falk's Web site at <a href="https://www.e-falk.com/jeopardy.php">www.e-falk.com/jeopardy.php</a>.

#### **UW-Oshkosh**

submitted by Hosien Moghadam

Professor **John Koker** accepted to be the interim Dean of the College of Letters and Science at UW Oshkosh for AY 2006-2007. **Hosien S. Moghadam** was elected the acting Chair of the Mathematics Department. **Jennifer Szydlik** was promoted to Professor and **Grady Bullington** was promoted to Associate Professor. **Joan Hart** and **Kenneth Price** were granted tenure. **Carol Seaman** received tenure and promoted to Associate Professor.

Norbert Kuenzi, John Koker and John Beam made presentations at the NCTM regional conference in Chicago Sept. 21-22. Jen Szydlik, Eric Kunnen, John Beam and Carol Seaman accompanied 18 students at the NCTM conference in Chicago. Ken Price presented a paper at the Noncommutative Algebra Conference at Granada, Spain on Sept. 1, 2006.

#### **UW-Platteville**

submitted by Sheryl Wills

**Rob Calcaterra** earned the MAA-Wisconsin Section Distinguished Teaching Award (see report elsewhere in this newsletter.) **Benjamin Collins**, **Mike Ira**, and **Julie McDonald** were granted tenure. Julie was also promoted to full Professor. **Mu-Ling Chang** was promoted to Associate Professor.

The department welcomes two new academic staff members, Colleen Cornell and Amy Dye.

#### **UW-Stout**

submitted by Steve Deckelman

Three new faculty joined the department this fall. **Matt Horak** (PhD Mathematics, Cornell), **Helen Schroeder** (PhD Candidate, Mathematics Iowa) and **Terry Mason** (PhD Computer Science, Iowa).

Joy Becker has been promoted to associate professor. Jeanne Foley has been hired at the associate professor level. Mingshen Wu has been named a University Dahlgren Professor for the next two years. Chris Bendel has been named UW-Stout Outstanding Researcher for his work in Lie Algebras. Chris has also assumed duties as our new department chair. Eileen Zito is on Sabbatical this fall. Emeritus Professor John Hunt has returned to teaching this fall.

**Jeanne Foley, Eileen Zito, Deborah Kruschwitz-List** and **Laura Schmidt** have been awarded a \$450,000 Department of Education FIPSE grant for their work in the department's Math Teaching and Learning Center. Beginning in July, 2007, they will be offering a series of workshops for UW System faculty and teaching staff interested setting up a technology-aided course delivery system for beginning and intermediate algebra courses In addition Jeanne was awarded the College's Outstanding Teaching Award.

Laura Schmidt has been chosen to be an Invested Scholar through the University's Scholarship of Teaching and Learning (SOTL) program. A number of department faculty have been involved in SOTL projects including Anne Antonippillai, Diane Christie, Radi Teleb, Nelu Ghenciu and Joy Becker. Following a workshop led by Bill Cerbin (UW-Lacrosse) in September of 2005, groups of faculty in our department conducted two lesson study projects: one in calculus and one in intermediate algebra. Members of the calculus group were Anne, Chris, Joy, Laura, Nelu, Radi. Members of the intermediate algebra group were Diane, Laura, Anne. Two more are planned for this year, including one in computer science. Results of the lesson study projects were distributed through local and regional talks, as well as a talk at MathFest in Knoxville. Former department member Haiyan Tian also participated.

The department is excited about its first year running the MAA's high school math contest under Laura Schmidt's stewardship.

**Radi Teleb** and **Joy Becker** were awarded grants in the areas of cybersecurity and information assurance. Both Radi and **Chris Bendel** have been involved in directing undergraduate research, with students presenting at the UW-System Symposium on Undergraduate Research and Creative Activity.

#### **UW-Whitewater**

submitted by Mohammad Ahmadi

The Department filled two Tenure Track positions at the Assistant Professor level and one Academic Staff position. We are very pleased to welcome the following members.

**Gahyun Park** received her Ph.D. from the department of Computer Science at Purdue University. Gahyun's research interests are in the area of Algorithms, Parallel and Distributed Computations, and Bioinformatics.

**Jeffry Phan** received his Ph.D. from Columbia University. Jeffry's specialties are in algebra and combinatorics.

**Peter Lampe** was hired as a lecturer for 2006 – 2007 academic year.

**Jonathan Kane** spent one week lecturing at the Awesome Math Camp, a new summer program held at the University of Texas at Dallas. Kane published his joint article "Dropping Lowest Grades" with his son **Daniel Kane**. The paper appeared in June 2006 issue of Mathematics Magazine, and was later reviewed in Science News Onlin <a href="http://www.sciencenews.org/articles/20060610/mathtrek.asp">http://www.sciencenews.org/articles/20060610/mathtrek.asp</a>.

**Julie Letellier** participated in the "Energizing UWS SoTL Activities in Mathematics" program. The workshop was held August 17-18 at UW-Eau Claire. Julie will present her results at the 2007 MAA/Wisconsin Section Meeting in Eau Claire.

**Ki-Bong Nam** was tenured and promoted to associate professor. Ki-Bong delivered several lectures at KNUE (Aug. 2), Jeonju Univ. (Aug. 3), Chonbuk Univ. (Aug. 4), Yonsei Univ. (Aug. 10), Korea Univ. and Hanyang Univ. (Aug. 14), 2006. He also gave a talk at ICM Conference in Spain, Aug. 24, 2006. Nam published the following papers.

- 1. Sapna Jain and Ki-Bong Nam, Lower Bounds for Codes Correcting Moderate-Density Bursts of Fixed Length with Lee Consideration, Linear Algebra and its Applications, Vol. 418, Issue 1, 1 Oct. 2006, 122-129.
- 2. Seul Hee Choi and Ki-Bong Nam, "Derivations of a Restricted Non-Associative Algebras with Exponential Functions I", 4 (2006), no. 2, 65--71.
- 3. Seul Hee Choi and Ki-Bong Nam, "Degree Stable Lie algebra I", 13 (2006), no. 3, Algebra Colloquium, 487--494.
- 4. Ki-Bong Nam, AUTOMORPHISMS AND ISOMORPHISMS OF RESTRICTED WEYL TYPE ALGEBRAS I, 419, Hadronic Journal, Vol. 29, Number 4, Aug. 2006.

**Thomas Drucker** gave a talk on "Who Hijacked the Philosophy of Mathematics?" at Western Regional Meeting of AMS (San Francisco, April 30, 2006), and a talk on "Misapplications of Mathematics" at the Annual Meeting of the Canadian Society for History and Philosophy of Mathematics (Toronto, May 28, 2006). Drucker also spoke about "The Halls of History" at the

retirement of Professor James E. Hall, Westminster College, New Wilmington, Pennsylvania (May 5, 2006). Thomas taught at the MathPath Programme, University of California—Santa Cruz (first two weeks of July), written up in the Wall Street Journal for Saturday, July 29, 2006. Drucker wrote a review of N. David Mermin's It's About Time for the Newsletter of the London Mathematical Society, September 2006, pp. 22-23.

#### Wisconsin Lutheran College

submitted by Mel Friske

Ron Buelow joins WLC as an associate professor. Ron is a veteran mathematics educator having taught at every level from elementary to secondary to college. He has an undergraduate degree in education, a masters in mathematics, and a doctorate in instructional technology and distance education. He taught most recently at Bethany Lutheran College (Minnesota) and as an adjunct at Minnesota State University in Mankato. At WLC Ron will coordinate our mathematics courses for the BA degree and distance education.

**Mel Friske** has completed the first semester of his text on real analysis and the manuscript is being class tested. Mel is beginning his 30<sup>th</sup> year as a college professor.

**Dave Gebhard** has been promoted to associate professor. This past summer he participated in scoring the College Board AP Calculus Exam.

**Kristen Meyer**, a 2001 WLC graduate, has returned as an assistant professor. Kristi completed her dissertation on quasigroups and message authentication codes at Iowa State University in May 2006 under the direction of Clifford Bergman. At Iowa State she served as president of the graduate student council, student member of the university strategic planning committee, and received several awards for teaching excellence. Her research interests are cryptography and universal algebra. Kristi is a "Sepia dot" Project NExT Fellow.

**Dave Schulz**, who heads our computer science curriculum, is nearing the completion of a twenty year career at Bell (AT&T) Labs with whom he still telecommutes. His recent work in computer speech processing was the climactic feature this summer in an AT&T television commercial.

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