## The Mathematical Association of America



# Wisconsin Section Newsletter Fall 2007

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

I participated in my second-to-last Board of Governors' meeting at MathFest in San Jose, CA in August 2007. It was by far the shortest meeting I attended. It was efficient as well.

It was a good meeting and the reports on the usual issues (financial, publications, AMC, membership, committees) were, for the most part, positive. Simply said, the MAA is in good shape. However, the Budget Committee reported a proposed deficit for the 2008 operating budget. The deficit reflects a 3% drop in membership, attributed to the new dues structure, and a drop in indirect costs from federal grants. Book sales, particularly those through Amazon, remain strong. The MAA recognizes a need for new revenue sources.

As you may know, the MAA has been going through a series of Strategic Planning cycles in an attempt to examine key elements of the Association's work in light of its mission. The Board of Governors has been participating in the process in several ways - by having focus groups, for example, and by directing the Executive Committee on what it sees as priorities for study. The final reports of these committees are available to MAA members at <a href="https://www.maa.org/aboutmaa/sp">www.maa.org/aboutmaa/sp</a>.

The three topics chosen by the Board for Cycle III are: Meetings, Sections, and STEM-related issues in Mathematics. The third cycle is ready to begin. I have been invited (and I accepted) to be on the working group for Sections. My first meeting is in DC later this fall. Please feel free to contact me with any thoughts about how sections could work better to serve needs of MAA members.

Ivars Peterson, the new Director of Publications for Journals and Communications, reminded all of us to check MAA Online often to keep up-to-date with mathematical activities. He is also looking for suggestions from members on novel programs that exist within our sections.

Hope to see many of you in San Diego on January 6, 2008.

John Koker, UW Oshkosh

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

The 75th Annual Spring Meeting of the MAA-Wisconsin Section was hosted by UW-Eau Claire the weekend of April 20-21, 2007. We celebrated the 300th Anniversary of Euler's Birth by arranging seven talks and one invited address related to the works of Euler. I would like to thank all of those who helped make last spring's section meeting the exciting and stimulating event that it was. In particular, I would like to thank the site coordinator, Simei Tong, and the entire mathematics department at UW-Eau Claire for the work they did to take care of local arrangements. My sincere thanks goes to our Public Information Officer, Ben Collins, for cooperating with me in putting together this wonderful program.

I would also like to thank all of our speakers, from students to invited guests. The attendance at the meeting was excellent. According to our Treasurer/Secretary, Mark Snavely, a total of 220 people registered for the meeting. Of those, 87 were undergraduate students. The data shows that the number of participants (students and non-students) was up this year from previous year. There were plenty of student talks, and we hope to see that trend continue.

Congratulations to Dr. Robert L. Wilson of UW-Madison who was awarded our section's distinguished teaching award at the Spring Section meeting at Eau Claire.

Four local teachers received Teaching award. Scott Swita (from Granton), and Sue Maenner (from Altoona), received teaching awards for excellence in teaching High School mathematics. Susan Poulda (from Gilman), and Barbara Retzloff (from Strum), were both recognized for excellence in middle grades mathematics education.

The spring 2008 meeting will be held at Madison Area Technical College (MATC) on April 25-26. Andrew Matchett of UW-La Crosse is the chair-elect and has been hard at work preparing for the meeting. We welcome his return to the executive board.

Let me close by thanking the executive committee for all their support, and offer special thanks to J. Sriskandarajah, and Mark Snavely in guiding me throughout this journey.

Mohammad H. Ahmadi, UW-Whitewater

#### 2007 Wisconsin Section Teaching Award

The recipient of the award was UW-Madison mathematics professor **Dr. Robert Wilson**. Professor Leslie Smith, Chair of the Mathematics Department at UW-Madison, wrote the following in nominating Professor Wilson for this award:

"Bob Wilson is a master in explaining mathematics, more generally, in explaining how things work. For over 30 years, he has been devoted to teaching and to students. Bob has an incredible knowledge of and facility for technological things. This contributes to his considerable success in the classroom and to his immense popularity as a teacher. His experience in industry has been an important influence in his teaching, and students react very favorably to his real-world knowledge. Bob has worked with graduate students on problems in math education and is the pivotal person in a seminar on math education. He has been very influential in undergraduate education about math and its applications, and in graduate education about educational issues."

#### **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 2008 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, 2007.

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

This year the Fall Meeting of Project NExT-Wisconsin was held from September 28 – September 30, 2007. Dr. Aparna Higgins, the co-director of National Project NExT, led a workshop entitled "Undergraduate Research-An Introduction to our Profession." As usual the workshop was held at "Olde Towne" and participants stayed at a local hotel in Menomonie, WI.

This year 4 new participants have joined the Project NExT-WI section. The current membership is holding at 25.

There is a list of fellows 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 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 me at <a href="mailto:ulhaqi@uwplatt.edu">ulhaqi@uwplatt.edu</a> (application material is also accessable at <a href="http://www.uwplatt.edu/nextwi/">http://www.uwplatt.edu/nextwi/</a>).

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

#### **Contest Report**

#### **American Mathematics Competitions**

The AMC 8 competition was held on November 14, 2006. A total of 2107 Wisconsin students participated in the competition (down from 2760). For the first time in at least five years, two Wisconsin students had perfect scores: Suhas Kodali of Madison and Cutler Lewandowski of Wausaukee. The average score for Wisconsin students was 9.25, compared with the national average score of 10.14. This is a slightly narrower gap than last year.

The AMC 10 and 12 contests were held on February 6 and 21, 2007. A total of 710 Wisconsin students took the AMC 10 (down from 917), and 1462 (down from 1,616) took the AMC 12 for a total of 2,172 overall. This number is down from the 2,533 taking the exams in 2006. Of the Wisconsin students, 90 scored well enough to be invited to take the American Invitational Mathematics Examination (AIME). This number is down from 269 in 2006 and 205 in 2005. For the first time in several years, there was one perfect score in Wisconsin, by Iris Xu. The average score for Wisconsin students compared to the national average scores are in the following table:

	10A	10B	12A	12B
Wisconsin	65.1	65.1	65.2	73.6
National	67.9	61.5	66.8	73.1

Six Wisconsin students qualified for the United States Mathematical Olympiad: Timothy Black and Iris Xu of James Madison Memorial High School, Daniel Mulder of Maranatha Baptist Academy, Samuel Balinghasay of Marshfield HS, Kyle Stankowski of Mosinee Middle School, and Ye Wang of Nicolet HS.

The next AMC 8 is November 13, 2007 and the AMC 10 and 12 will be given February 12 and February 27, 2008.

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

The Section contest examination was given on Thursday, December 7, 2006. There were 4085 high school students' scores reported from 85 schools. This year, there were 29 perfect scores reported. The cutoff score for the top 1% was 115 out of 120.

The contest winners in combined state contest and AMC scores were Iris Xu and Timothy Black, both of James Madison Memorial High School.

Many thanks to the UW-Stout faculty and all those who participated in writing the 2006 contest. The UW-Stout faculty invite those interested in helping in the 2007 contest to contact them in September. The contact person is Dr. Laura Schmidt.

Respectfully submitted,

Kristen Lampe

Carroll College

#### Student Activities

The co-Coordinators, Ken Price and Steve Szydlik, hope you will encourage some of your students to attend conferences and possibly give talks. The quality and quantity of presentations continues to be impressive. The Pi Mu Epsilon Regional Undergraduate Math Conference is coming up soon, November 2-3, 2007 at St. Norbert College. This year's featured speaker is Keith Devlin from Stanford University. He will present engaging talks on "The Numbers Behind NUMB3RS" and "Math 20-20 Vision."

The spring 2008 section meeting will be held at the Madison Area Technical College on April 25-26. Let your students know they can receive a complimentary one-year MAA membership simply by giving a talk at this meeting. Student presenters who are already MAA members can receive a free book instead. 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 2007 meeting, we were able to offer a popular student retreat room at UW-Eau Claire, and plan to do so again in 2008.

The Wisconsin Mathematics Council's Annual Green Lake Conference is scheduled for May 1-2, 2008. 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 a number of conferences this year: for Middle School students at MATC in October 2007, at the Pi Mu Epsilon regional undergraduate conference at St. Norbert College in November and also at the MAA-Wisconsin section meeting in April. (See announcement below.)

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

#### **Face Off: The Mathematics Game Show**

What is it? Face Off is a mathematics quiz show with questions from the broad realm of mathematics. And we mean broad! Teams of 2-4 students representing their schools compete to answer these questions. Each team gets a sign with the face of a mathematician (For example, your team could play as Descartes, Gauss, Hilbert, Noether, or Newton.) A team holds up its sign to answer a question and earns points depending on whether its answer is correct.

Teams can use a calculator, paper, and pencil. For more information, visit the Face Off website at its new address, given below.

Where is it? MAA-Wisconsin Section meeting at MATC in Madison

When is it? Friday, April 25, after the invited speaker presentation

#### Sample Questions:

The *Off Limits* category contained the following questions.

20 pts. What is  $\lim x \to \pi/2$  ( $\sin x$ ) / x?

40 pts. What is  $\lim x \to 2(x-3)/(x-2)$ ?

60 pts. What is  $\lim x \rightarrow 0 |x| / x$ ?

80 pts. What is  $\lim x \to 1 (2x - 2) / (x - 1)$ ?

The Take a Number category contained the following questions.

20 pts. How many pips are on a standard die?

40 pts. What prime number is both the sum of two primes and the difference of two primes?

60 pts. What two-digit number has a cube root equal to the square root of the sum of its digits?

80 pts. What is the smallest non-palindromic number whose square is a palindrome?

Please contact one of the organizers if you would like to enter a team. Any student who has taken or is enrolled in Calculus I is eligible to join a Face Off team representing their school. If a school doesn't have enough interested students, contact the organizers anyway – we can combine interested students to form hybrid teams. Space will be limited, so form a team soon and let us know of your interest!

Face Off Organizers:

Dr. Ken Price (pricek@uwosh.edu, (920)424-1057),

Dr. Steve Szydlik (szydliks@uwosh.edu, (920)424-7346),

http://www.uwosh.edu/faculty\_staff/szydliks/faceoff.htm

#### **CALL FOR SPEAKERS**

 $76^{th}$  Annual Meeting of MAA/Wisconsin Section, April 25 – 26, 2008

Madison Area Technical College

The Wisconsin Section of the MAA will hold its 2008 Spring Meeting at MATC-Madison on April 25-26, 2008. Please consider giving a talk about your work in mathematics, an issue concerned with mathematics education, or pedagogy of mathematics. 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:

Andrew Matchett, Mathematics Department, UW-La Crosse, La Crosse, WI 54601

Phone: (608)785-8391 FAX: (608)785-6602 email: matchett.andr@uwlax.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	SE FORM – DUE: JANUARY 19, 2008					
Name:						
Institution:						
Address:						
Phone: Email:						
Title of talk:						
Length of talk: 25 minutes or 50 minutes						
Abstract:						
Check here if your talk	c is appropriate for students:					
Equipment needed:						
Time preference:	Friday afternoon is imperative	Preferred				
	Saturday afternoon is imperative	Preferred				
	Either time is acceptable					

#### **CALL FOR STUDENT SPEAKERS**

Student Mathematics Conference

Equipment needed:\_\_

Time preference:

Madison Area Technical College April 25 - 26, 2008

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, 2008 to:

Andrew Matchett, Mathematics Department, UW-La Crosse, La Crosse, WI 54601

Friday afternoon is

Andrew Matthett, Mathematics Department, OW-La Crosse, La Crosse, W1 34001								
Phone: (608)785-8391	FAX:	(608)785-6602	email: matchett.andr@uwlax.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 RESPONS	E FORI	M – DUE: MARCH 16, 200	08					
Name:		Year in Schoo	1					
Institution:			<del></del>					
Address:		Phone:	<del></del>					
		Email:						
Faculty Sponsor:								
Title of presentation:								
Brief description of presentation								

imperative

Saturday afternoon is imperative \_\_\_\_

Either time is acceptable \_\_\_\_\_

Preferred

Preferred \_\_\_\_

### Minutes of the Business Meeting April 21, 2007

- 1. The meeting was called to order at 8:03 by Section Chair, Jeganathan Sriskandarajah. Sri thanked our hosts at UW-Eau Claire, particularly Site Coordinator Simei Tong, and Mohammad Ahmadi, Chair Elect, for an excellent meeting.
- 2. The minutes of the business meeting of April, 2006, and the current treasurer's report were approved. The treasurer noted that it is somewhat involved to open an account for a non-profit organization at this time
- 3. John Koker presented his Governor's report, and took the opportunity to encourage members to attend Mathfest in San Jose, August 3-5. He encouraged members to check out the Carriage House in Washington DC, and noted that there are numerous speakers at that venue. Cycle 1 of the strategic planning initiative is complete, including a new dues structure. Cycle 2 is now beginning. Membership in the MAA is down, but revenue is slightly up. He encouraged all of us to vote in the national elections. The Joint Meetings are January 6-9, 2008, in San Diego. MathFest will be in Madison 7/31-8/2, 2008! Martha Siegel later added that the Society for Mathematical Biology will also be meeting in San Jose at the same time as we are. She also asked for volunteers for national committees. You can e-mail her directly (msiegel@towson.edu) with your background and interests.
- 4. Andy Matchett from UW-La Crosse was elected Chair-Elect of the section.
- 5. The Spring Meeting for 2008 will be at Madison Area Technical College, April 25-26. In 2009, we will meet at UW-La Crosse. UW-Oshkosh expressed an interest in hosting the meeting in 2010. No representative from UW-Marshfield was present, but they have extended an invitation for a future meeting.
- 6. The student math contest winners have yet to be announced.
- 7. Ben Collins reported that not all sections have liasons, and encouraged individuals at institutions without liasons to volunteer for this important position.
- 8. Ken Price and Steve Szydlik did a fantastic job setting up the Face Off! competition, and they are willing to do it again next year. Send potential game show questions to Ken or Steve. The efforts of Ken, Steve, and all student advisors were commended and applauded.
- 9. Irfan Ul-Haq encouraged new faculty to join Wisconsin-NExT. Wisconsin-NExT holds two events per year, and individuals can remain members until tenure.
- 10. David Scott was thanked for 3 years on the Executive Committee. Sri again thanked the site coordinator, Simei Tong, and Mohammad Ahmadi for an outstanding meeting.
- 11. The meeting adjourned at 8:28 a.m.

Respectfully submitted, Mark Snavely, Secretary/Treasurer

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

Interview with Professor Rick Poss, by John Koker

1. When do you remember becoming interested in mathematics?

I can remember "showing off" my counting ability to my future teachers even before I started grade school. I have enjoyed math all of my life.

2. Was there a teacher who encouraged or influenced you?

There were many! Fr. Martin Dusseau taught me that math was fun. Fr. Kevin Ryan taught me that I could handle difficult math. Fr. Thomas Ostdick and Dr. Rose Carney taught me that math could be exciting and challenging. John Homer introduced me to the MAA.

3. Was there a time in your life when you discovered that mathematics was what you wanted to do for a career?

Even in high school I felt that I would continue with math. When I started in college, I expected to be a high school teacher. By my sophomore year, I realized that I wouldn't be able to deal with students of high-school age, so I decided that I would teach at the college level.

4. Where were you born?

Aurora, IL

5. And your undergraduate school and major was? What about graduate school?

I attended St. Meinrad College for two years, then completed my math major at St. Procopius College (now Benedictine University). I received my doctorate from the University of Notre Dame

6. How did you end up at St. Norbert College?

I was looking for a small liberal arts college in the Midwest, so I applied to just about every one of them. It helped that Cindy and I had friends living in Green Bay. I started teaching at St. Norbert College in 1970, right out of graduate school. I've enjoyed the school and it's feeling of community so much that I've never left!

7. When were you and Cindy married? And how about your children? When did they come along?

We were married in 1967. We celebrated our 40<sup>th</sup> anniversary this past August. Michelle was born in 1969; Ken was born in 1971. We have four grandsons, ages 9, 6, 5, and 3.

8. I know that students have been a big part of your career. Can you please talk about what students have meant to you as a teacher and mathematician?

Students are the whole reason for teaching! I love the daily interaction with the students and the opportunity to share with them my excitement about mathematics. I found my professional niche by working with students as advisor to the math club at St. Norbert College.

9. In general, it would be unfair to ask you to name your favorite student. However, who is your favorite student in the set of all students who received a Ph.D. from UW Milwaukee, taught 1 year at SUNY Potsdam, chaired the UW Oshkosh Mathematics Department for 6 years and is currently the Dean of the College of Letters and Science at UW Oshkosh?

John Koker is an especially memorable student. It's hard to pick other favorites. I'm proud of all of my former students, whether they went on to graduate school, went into high school teaching, went into some sort of business field, or chose any other career path.

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

My dissertation is in formal logic. My current area of interest is helping undergraduates do research – in any area in which we might find an interesting problem.

11. What courses do you like to teach?

All of them! I've taught almost every mathematics course that St. Norbert College offers, from Basic Algebra, through Calculus, up to Complex Analysis. (I've taught 21 different courses, not including independent studies.) My current favorites are Set Theory and Calculus II.

12. For years students and mathematicians have traveled to St. Norbert for a Pi Mu Epsilon meeting. It has become a Wisconsin mathematics tradition. What has the success of this meeting meant to you.

Hosting this conference was not my idea. I had taken a bunch of students to a different regional conference, and on the way home, they said, "We could do this." So, we did! The reasons for whatever success the conference might enjoy are the faculty who give up their time to help students prepare presentations and then bring them to the conference and the students who come to share what they have learned. Without these students, there would be no conference. The satisfaction that I get from the conference is in seeing the excitement of students as they make new friends and share their love of mathematics.

13. Talk a little about your experience as president of Pi Mu Epsilon.

I was apprehensive and a bit terrified by the idea of being in charge of such an important and venerable organization. Some special memories are: realizing that I was the one who had to ask the NSA to continue its support for student speakers to the national conference; dealing with the change in the summer national meetings when the AMS decided to no longer participate; reaching out to Kappa Mu Epsilon, the other national honorary mathematics society; representing PME at the ceremonies honoring the USA IMO participants; and being the PME representative at the funeral of J. Sutherland Frame, who was the person most responsible (in my opinion) for the success of the organization. As President, I was gratified to discover the respect that other mathematical organizations have for PME.

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

The best part of being a mathematician is having the ability to see the world in a way not open to non-mathematicians. I also like to see the fear in the eyes of people when I tell them that I'm a mathematician. (Just kidding!) The worst part is having so many people tell me that they were never any good at math, or that they always hated math. I hope that we can find some way to make the learning of mathematics less intimidating.

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

I teach! I try to get students who enjoy math and do well in it to consider continuing with it. I try to help those who fear math or struggle with it to feel a bit better about it. In general, I try to get all students to increase their knowledge of and appreciation for mathematics. The more mathematics that our students know, the better prepared they will be for the increasingly complicated and technical world in which they live and will work.

#### **Campus News**

Carroll College

submitted by Kristen A. Lampe

The mathematics program at Carroll College is excited to welcome two faculty members this year.

**Dr. Christopher Kuster** joins us as an Assistant Professor in the area of applied mathematics. Chris earned his PhD in August 2006 from North Carolina State University.

Darryl Johnson is a Visiting Instructor this year, coordinating the Introductory Statistics course.

Carthage College

submitted by Mark Snavely

Carthage College welcomes two new colleagues to the Mathematics Department. **Dr. Dominic Klyve** finished his Ph.D. at Dartmouth College in 2007. He is co-founder and director of the Euler Archive, and online repository of the works of Leonhard Euler. **Dr. Erik Tou** also received his Ph.D. from

Dartmouth College in 2007. Erik is the Chief Historian for the Euler Archive. Please join us in welcoming Dominic and Erik to the Wisconsin Section.

#### Lawrence University

submitted by Alan Parks

**Scott Corry** has joined the mathematics department at Lawrence University. Scott has just finished his PhD at the University of Pennsylvania, having received his BA from Reed College. His research areas are number theory and algebraic geometry.

#### Madison Area Technical College

submitted by J. Sriskandarajah

Math Club Events:

- Lecture # 64, Wednesday, September 5, 2007, 3:30 PM, Room 209; Professor Clement Jeske, UW-Platteville Who's guarding the gallery?
- Lecture # 65, Friday, October 19, 2007, 3:30 PM, Room 209; Professor Benjamin Collins, UW-Platteville
  - A marvelously terrible algorithm from Leonhard Euler
- Lecture # 66, Tuesday, October 23, 2007, 9:00-10:00 AM, Mitby Theater; Professor Tim Chartier, Davidson College *Mime-matics*
- Lecture # 67, Monday, November 12, 3:30 PM, Room 209; Professor John Kiltinen, Northern Michigan University
  - The math behind the "15" puzzles and the other permutation puzzles
- Lecture # 68, Wednesday, December 12, 3:30 PM, Room 209; Professor Steven Post, Edgewood College

Probability Puzzlers

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

We welcome **Younis Zaidan** as a Visiting Assistant Professor. Younis completed his PhD in Differential Equations at UWM this past summer.

**John Frohliger** is on sabbatical this semester. He is preparing a new course which will become part of the College's General Education Program. John has served as the Associate Dean of the Natural Sciences for the past five years. We are looking forward to having him back in the math discipline teaching full time.

**Bonnie Berken** and **Rick Poss** begin phased retirement this year. Both are teaching only in the fall semester and intend to visit warmer climates during the winter term.

**Bonnie Berken** and **Katherine Muhs** are working with 30 Green Bay Public School District teachers as part of a Math/Science Partnership Grant. The teachers, from grades 3-8, come to SNC for graduate courses in Math content, applications, and pedagogy. They are also observed teaching math class several times during the course of the grant followed by discussion of that teaching. The goal is to increase teacher understanding and skills in order to increase their students' mathematical knowledge and skills.

**Terry Jo Leiterman** is offering a new course for math and physics majors this fall called "Math Modeling", which will investigate population dynamics and mechanical vibrations. The class is building a square wheel bicycle which plans to debut at the Pi Mu Epsilon Conference on November 2<sup>nd</sup> and 3<sup>rd</sup> here at SNC.

**Larry Thorsen** continues as the Director of the SNC Honors Program. He has been serving the College in this role for 21 years.

**Bonnie Berken** is offering a Writing Intensive College Algebra and Finite Math course this semester as part of the College's Writing Across the Curriculum Program.

SNC will host the Twenty-Second Annual Pi Mu Epsilon Regional Undergraduate Math Conference on November  $2^{nd}$  and  $3^{rd}$ . The invited speaker is Keith Devlin from Stanford University. All are welcome.

**UW-Madison** 

submitted by Robert Wilson

With **Leslie Smith** as our present chair, the department continues to develop in many ways.

This year we mourned the death of John Harvey, For many years before his retirement, John was jointly in the math department and in the department of Curriculum and Instruction. He had been very active in the Wisconsin Section and the Wisconsin Math Council as well as curricular reform for K-12 across the country.

Recent retirees include Pat Ahern, Georgia Benkart, Arnold Johnson, Jim Kuelbs, and Peter Orlik, while new tenured, tenure track and post-doc faculty this year are Hsian-Hua Tseng, Jean-Luc Thiffeault, Fedja Nazarov, Mustafa Kalafat, Amanda Folsom, and David Anderson.

Late in 2006 retired Prof. **Walter Rudin** received an honorary doctorate from the University of Vienna. This is the first honorary doctorate in mathematics they have given since Carl Ludwig Siegel received one in 1956. The 11th annual Wolfgang Wasow Memorial Lecture was given by **Elias Stein**, and the 11th lecture in the series on Linear Algebra and Applications by **Ronald DeVore**. **Andrew Majda** and **Helmut Hofer** were this year's Distinguished Lecturers.

Professors **Xianghong Gong**, **Shi Jin**, **Bob Wilson**, and **Tonghai Yang** had research sabbatical leaves for part or all of the last academic year. This year Professor **Marty Isaacs**, **Ken Ono**, and **Paul Terwilliger** have sabbaticals.

The department has been working closely with the Madison Metropolitan School District and other districts in the region in programs for elementary and middle school teachers. We have just completed a program called "Math Masters" that had UW faculty and MMSD resource teachers working with middle school teachers for classes on algebra, geometry, probability, measurement, and proportional reasoning: A key part of this program was that the courses were to be taught using text materials and teaching methods that the middle school teachers will themselves be using in their classrooms. A new program, started late in the summer, Extending Mathematical Knowledge, is for teachers in grades 3-5. A UW faculty member (**Bob Wilson** from this department) taught an intensive class in the summer along with MMSD math resource teacher **Carrie Valentine**, and they will continue working with the elementary teachers in sessions during this school year. A committee pulling together the math department, the school of education, and MMSD, has created a new program for students preparing to be middle school teachers: Wisconsin certification at present makes no distinction between preparing to teach 1st grade and 8th. This specialized mathematics minor will include the existing (but evolving) courses for preservice elementary teachers and add courses specific to middle school algebra and precalculus, with calculus content, and a capstone course to pull it all together.

Our summer REU program continues to thrive. Last summer's number theory group, led by **Ken Ono** and **Amanda Folsom** with graduate students **Jeremy Rouse** and **Frank Thorne**, had ten students, two still in high school! The last couple of years programs have included four Putnam winners, last year's winner of the Morgan Prize (**Daniel Kane**), last year's first runner up and this year's winner of the Alice T. Schafer prize (**Yaim Cooper** and **Alison Miller**), and several winners in the International Mathematical Olympiad. Undergraduate research also is fostered in our CURL (Collaborative Undergraduate Research Lab) program funded by NSF as part of our VIGRE grant.

**UW-Milwaukee** 

submitted by Jay H. Beder

Assistant Professor **Lijing Sun** joined the department in Fall 2007. She received her PhD in Mathematics from Wayne State University in August 2007. Her current research interests are in the interactions between Harmonic Analysis, Geometric Analysis, and Partial Differential Equations. Specifically she focuses on the study of sub-elliptic operators.

Assistant Professor **Chao Zhu** also joined the Department right after he received his Ph.D. in mathematics from Wayne State University in August 2007. His current area of research is in regime-

switching diffusions and their applications. He and Lijing are married and live in an apartment close to Lake Michigan.

Yi Ming Zou has been promoted to Full Professor, and Istvan Lauko to Associate Professor with tenure.

Professor **Albert Milani** has received a Fulbright Foundation research and teaching grant for the research project, "Long time behavior of solutions to quasilinear evolutions".

The Northwest Mutual Foundation has given the department's Actuarial Sciences Program a gift of \$750,000, along with an additional \$250,000 to UWM for scholarships for underrepresented students across the University. The grant to the Program will support hiring of faculty and teaching staff, broadening course offerings, and attracting strong students.

**Robert Moore**, Associate Professor Emeritus, has made a gift to the College of Letters and Science to support a peace-building network across diverse fields, to be housed within the College's Institute of World Affairs. According to the College, the goal of the gift is to institutionalize a process that addresses common goals and concerns about the future of society and the world. Those interested in making donations may contact Lisa Pieper, Development Office, at 414-229-3294 or <a href="mailto:lrpieper@uwm.edu">lrpieper@uwm.edu</a>. More information is at <a href="http://www.uwm.edu/letsci/collegium/collegium/2007.pdf">http://www.uwm.edu/letsci/collegium/collegium/2007.pdf</a>

Associate Professor **Gabriella Pinter** has won a UWM Distinguished Undergraduate Teaching Award for 2007. She is the fourth member of the department to be so recognized. The Award is being presented at the Annual Fall Awards Ceremony on October 2.

Professor **Jon Kahl** of the Atmospheric Sciences group was awarded a "Teaching Excellence" award by the UWM Alumni Association

(http://www4.uwm.edu/alumni friends/alumni association/get connected/scholarships.cfm). The check was presented to him at the UWM Alumni Association's holiday reception last December, and a plaque was presented to him at the Alumni Association's Annual Awards Program and Reception on May 19, 2007.

UWM's Student Accessibility Center has given two of five Above and Beyond Awards to department members **Michael Hero** and **Chris Sears**. Mike received his Ph.D. from the department in 1990 and has been a lecturer since 1995. Chris received his Ph.D. this year. Further information may be found at <a href="http://www.uwm.edu/News/report/07.06/R">http://www.uwm.edu/News/report/07.06/R</a> Jun07.pdf

**Kelly Kaiser Kohlmetz**, Coordinator for Math 095, is co-author of the first edition of *Intermediate Algebra*, published in January by McGraw-Hill.

A number of students finish their PhDs and Master's. They're listed on <a href="http://www.uwm.edu/Dept/Math/Alumni/alumPhD.html">http://www.uwm.edu/Dept/Math/Alumni/alumPhD.html</a> and <a href="http://www.uwm.edu/Dept/Math/Alumni/alumMS.html">http://www.uwm.edu/Dept/Math/Alumni/alumMS.html</a>.

#### **UW-Platteville**

submitted by Sheryl Wills

We welcomed three new faculty members this Fall. **Ahyoung Kim** received her Ph.D. in mathematics from University of Wisconsin-Madison in 2007. Her dissertation was in functional analysis and harmonic analysis under the direction of Alexander Kiselev. Ahyoung also has B.S. degrees in mathematics and food & bioengineering from Yonsei University in South Korea. **Pamela Peters** received her Ph.D. in mathematics at Colorado State University in 2007 in the area of algebraic topology. Pam also has M.S. degrees in mathematics from Colorado State University and in systems management from University of Southern California, as well as a B.A. in mathematics from Arizona State University. **Zia Uddin** received his Ph.D. in mathematics from University of Florida in 2004 and is currently an assistant professor at Lock Haven University in Pennsylvania. Zia also has a M.S. degree in mathematics from University of Idaho.

Mu-ling Chang has been awarded tenure.

**Alexander Basyrov** joined the department as a new tenure track faculty member. He received his PhD from Indiana University under Sergey Pinchuk in Several Complex Variables. Tim Zick from Iowa State and Charles Serros from UW-Stout and UW-Eau Claire joined the department for yearlong academic staff positions. Christie Ferrara and Heather Stevens have joined the department as adjuncts for the fall semester. Chris Bendel has resumed chairing the department after returning from a spring sabbatical at the University of Virginia. In June, Chris co-organized a workshop at the American Institute of Mathematics (AIM) in Palo Alto entitled Cohomology and Representation Theory for Finite Lie Groups in June. Jeanne Foley was awarded the University's Merle Price Faculty Award for Excellence. The University makes only one such award per year and is based on (1) a strong record of teaching and learning innovation, and/or (2) research contributing to the mission of the university including research involving students. Mingshen Wu is currently on sabbatical during the fall semester. Nelu Ghenciu attended and presented at the First Joint International Meeting between the AMS and the Polish Mathematical Society, July 31 – August 3, 2007, University of Warsaw, Poland. Laura Schmidt was one of the keynote speakers for the Scholarship of Teaching and Learning Conference held at Stout in May entitled Teaching, Learning and Technology: What does SoTL Reveal?

#### **UW-Whitewater**

#### submitted by Mohammad Ahmadi

The Department hired two new tenure track faculty. **Tamas Szabo** joined us from the Weber State University in Utah. Tamas received his PhD from the University of Memphis, and his area of interests are in mathematics education and combinatorics. **William Mickelson** received his PhD from UW-Madison, and his area of interests are in statistical methods and statistics education. Most recently, William was a consultant in Madison, prior to which he was at the University of Nebraska-Lincoln. Also joining the faculty are **William Sageant**, a new academic staff, **Peter Theron**, a part time lecturer, and two visiting scholars, **Kyou-Hwan Han** (from S. Korea) and **Kirthi Premadasa** (from Sri-Lanka).

Congratulations are in order for **Ki-Bong Nam** who won the university research award, **Fe Evangelista** who won the college advising award, and the MCS program which has won (for the eighth time) an award as the top rated four-year college program in North America from the Association of Information Technology Professionals.

**Jonathan Kane** assisted in the grading of the 2007 USA Mathematical Olympiad, attended the Communicating Mathematics Conference in Duluth in July, and taught at the AwesomeMath Camp in Dallas, Texas. Jonathan also gave invited lectures at the University of Texas in Dallas in March and at Beloit College in September.

**Mohammad Ahmadi and Thomas Drucker** attended the MAA MathFest in San Jose, California. Thomas presented his paper 'Why wasn't there an Eighth Bridge?' in the session of contributed papers on Leonhard Euler in honor of his 300<sup>th</sup> birthday.

**Ki-Bong Nam** presented his joint paper "Notes on a semi-integral domain" with Xueqing Chen and Jeong-Sig Lee at the International Congress of Algebra and Combinatorics, in Beijing, China, July 5-9, 2007. **Ki-Bong** published the following papers.

- [1] Ki-Bong Nam, Generalized S-type Lie Algebras, Vol. 37, No. 4, Rocky Mountain Journal of Mathematics, 2007, 1291-1300.
- [2] Seul Hee Choi, Jeong-Sig Lee, and Ki-Bong Nam, "W-type and H-type Non-Associative Algebras using Additive Maps I", International Journal of Algebra, Vol. 1, 2007, no. 5-8, 335-346.
- [3] Lee, Jeong-Sig, Wang, Moon-Ok and Nam, Ki-Bong, "Notes on a stable algebra," I. J. Appl. Algebra Discrete Struct. 5 (2007), no. 1,
- [4] Ki-Bong Nam, Completely Non-Symmetric Algebras, Algebras Groups and Geometries, Vol. 23 (2006), no. 4 (Dec.), Hadronic Press.
- [5] Seul Hee Choi and Ki-Bong Nam, "Weyl type non-associative algebra using additive groups I," Algebra Colloquium, Volume 14 (2007), 479-488, Number 3, 2007.
- [6] Ki-Bong Nam and Seul Hee Choi, "On the Derivations of Non-Associative Weyl-type Algebras," Southeast Asian Bull. Math., (2007) 31: 341-348.

#### **Executive Committee 2007 – 2008**

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