MAA MISSOURI SECTION NEWSLETTER
FALL 2006 • VOLUME 28 • NUMBER 1

2007 MAA Missouri Section Meeting

The **Mathematics Department** of the **College of the Ozarks** in Point Lookout is looking forward to hosting the **Spring Meeting of the Missouri Section of the Mathematics Association of America** on Friday March 30 and Saturday March 31, 2007 (with the Missouri Collegiate Mathematics Competition beginning the evening of Thursday March 29). Contact Craig Haile at haile@cofo.edu for more information.

CALL FOR PAPERS

You are invited to present a paper at the Spring Meeting. Papers are to be between 15 and 20 minutes in length and may be on research topics or expository in nature and may deal with any topic in mathematics or mathematics education. For example, papers may pertain to your current mathematical scholarly activity, new courses that you have developed, or successful techniques you have found useful in teaching. You may opt to design a presentation directed to the undergraduate and graduate students attending the meeting. Faculty members are urged to assist honors students in presenting papers at the meeting. MAA student memberships will be awarded as prizes for the top student papers.

The abstract form is on the last page of this newsletter. Abstracts should be submitted by mail to:

> Craig Haile
> Department of Mathematics
> College of the Ozarks
> P.O. Box 17
> Point Lookout, MO 65726

Or email haile@cofo.edu

Please include all of the information requested on the abstract form: presenter's name, title, affiliation, contact information, title of paper, abstract, AMS subject classification, and special accommodations needed (overhead projector, computer, etc.). Also please indicate if the speaker is a student and if the paper is directed toward a student audience. Deadline for receipt of abstracts is **February 1, 2007.**

Section Teaching Award

NEW PROCEDURE THIS YEAR: STATE YOUR INTENTION TO NOMINATE BY NOVEMBER 15, 2006.

Nominations for the 2007 Missouri Section Award for Distinguished College or University Teaching of Mathematics are now being accepted. The Missouri Section Selection Committee will determine the recipient of the award from those nominated. The awardee will be honored at the Spring 2007 meeting of the Section and will be widely recognized and acknowledged within the Section. The awardee will also be the official Section nominee for the 2008 MAA Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics. There will be at most three national awardees, each of whom will be honored at the national MAA meeting in January 2008 and receive a $1,000 check and a certificate. A special session at that meeting is devoted to talks by the awardees on aspects of their teaching.

Anyone may make a nomination. An outline of the nomination process can be found on the MAA web site http://www.maa.org/awards/teachingawards.htm. Self-nomination is not permitted. If you are planning to nominate someone from your department, please send the name of your nominee to Mary Shepherd at MSHEPRD@nwmissouri.edu by November 15, 2006. The deadline for the submission of all materials remains **February 1, 2007.**

Eligibility

Nominees must satisfy the following criteria:

- College or university teachers assigned at least half-time during the academic year to teaching a mathematical science in a public or private college or university (from two-year college teaching through teaching at the Ph.D. level) in the United States or Canada. Those on approved leave (sabbatical or other) during the academic year in which they are nominated qualify if they fulfilled the requirements in the previous year.
- At least five years teaching experience in a mathematical science.
- Membership in the Mathematical Association of America.

Guidelines for Nomination

The nominees should
- be widely recognized as extraordinarily successful in their teaching*
- have teaching effectiveness that can be documented
- have had influence in their teaching beyond their own institutions**
- foster curiosity and generate excitement about mathematics in their students.

*"teaching" is to be interpreted in its broadest sense, not necessarily limited to classroom teaching (it may include activities such as preparing students for mathematical competitions at the college level, for example, the Putnam Prize Competition or the Mathematical Contest in Modeling, or attracting students to become majors in a mathematical science or to become Ph.D. candidates).

**"influence beyond their own institution" can take many forms, including demonstrated lasting impact on alumni, influence on the profession through curricular revisions in college mathematics teaching with national impact, influential innovative books on the teaching of college mathematics, etc.

Procedures

- Send an email to Mary Shepherd MSHEPRD@nwmissouri.edu stating your intention to nominate by **November 15, 2006**.
- Nominations must be submitted on the "**Nomination Form**" found on the Missouri Section web page at www.cs.rockhurst.edu/~brandt/momaa/teachingaward/teachingaward.html Anyone may nominate an eligible candidate, but self-nomination is not permitted.
- Please follow the instructions on the form precisely to assure uniformity in the selection process both at the Section and national levels. If a file on a Section awardee significantly exceeds the prescribed limits it will not be considered for a national award and will be returned to the Section.
- Nominations for the Missouri Section Award should be sent to Mary Shepherd at the address below so as to be received no later than **February 1, 2007**. Nominations for candidates who are not members of the Missouri Section should be sent to the Secretary of the nominee's Section.

> Dr. Mary Shepherd
> Department of Mathematics
> Northwest Missouri State University
> Maryville, MO 64468

Top Five Reasons for Not Making a Nomination and How to Dodge Them:
Adapted from KYMAA Fall 2005 Newsletter

1. Everyone in my department is such a good teacher; I can't possibly choose just one.
Solutions: Nominate everyone, or take turns nominating each other.

2. My dog ate the nomination packet.
Solution: Send in your dog.

3. I'm the best teacher I've ever met; how could I nominate anyone else?
Solution: Pay someone to nominate you.

4. All I ever needed to know about teaching I learned from my cat.
Solution: Nominate your cat.

5. I'm sure here are plenty of nominations already.
Solution: This is Missouri. Show off what you've got!

Secretary/Treasurer Nominations

Nominations for the position of Secretary/Treasurer are now being accepted. This is a 3 year position. As stated in the Section Bylaws:

The Secretary-Treasurer shall keep all the books, accounts, and records of the Section. The Secretary-Treasurer shall receive all monies paid into the Section for any purpose and shall deposit such money in a bank to the account of the Section, taking regular receipt of deposit thereof. The Secretary-Treasurer shall pay all bills of the Section out of the Section funds after the approval of the Chair. After each meeting of the Section the Secretary-Treasurer shall prepare a summary of the meeting and submit it to the Secretary of the Association.

Please send nominations to the Section Chair Craig Haile (email: haile@cofo.edu). Nominations will be forwarded to the nominating committee.

Certificate of Meritorious Service Nominations

Nominations for the Certificate of Meritorious Service are now being accepted. The MAA Board of Governors established this prestigious award to be presented at the national level for service to a section. Each section is entitled to nominate one person every five years. Our section is entitled to a nomination in 2007 to be presented at the 2008 Joint Meeting. The nomination form can be found on the section website at http://www.cs.rockhurst.edu/~brandt/momaa/forms.html. Please send nominations to either the Section Chair Craig Haile or the Section Governor Jim Bruening. Nominations will be forwarded to the nominating committee.

Future Meeting Sites

The Spring Meeting is held at various locations around the state. The meeting sites for the past several years and the next six years are listed below for your convenience. If your campus would be willing to host a Spring Meeting, please contact Craig Haile, Chair, or any other member of the Executive Committee.

1985	Central Missouri State University	1999	Rockhurst College
1986	Southwest Missouri State University	2000	Central Missouri State University
1987	Truman State University	2001	U. of Missouri-Rolla
1988	Washington University	2002	Truman State University
1989	University of Missouri-Columbia	2003	Washington University
1990	College of the Ozarks	2004	Southeast Missouri State University
1991	University of Missouri-Rolla	2005	Missouri Western State College
1992	Northwest Missouri State University	2006	University of Missouri-Columbia
1993	Westminster College	**2007**	**College of the Ozarks**
1994	Missouri Southern State College	2008	Southwest Missouri State University
1995	Central Missouri State University	2009	Truman State University
1996	Southeast Missouri State University	2010	Central Missouri State University
1997	Missouri Western State College	2011	University of Missouri-St. Louis
1998	Southwest Missouri State University	2012	Northwest Missouri State University

Missouri Collegiate Mathematics Competition

The twelfth Missouri Collegiate Mathematics Competition will be held Thursday, March 29, 2007 and Friday, March 30, 2007 on the campus of The College of the Ozarks in Point Lookout, Missouri. Any college or university in the state of Missouri can send up to two official teams of 1-3 undergraduates each to compete in the competition. Unofficial teams will be allowed, depending on the amount of available space, but will not be eligible for awards. They will also be charged the normal registration fee.   A one-person team will be allowed if this person is his or her college's only representative in the competition. A completed registration form for each team must be sent one week before the competition begins. Late registration will be accepted only if there is room available. No calculators or computers or reference material can be used during the competition. The contest consists of challenging mathematical problems, comparable to but not quite as difficult as the Putnam Exam.

The first session will begin on Thursday evening at 7:30 pm and last until 10 pm and the second session will begin on Friday at 8:30 am and will end at 11 am. There are five problems in each session. Each problem will be worth 10 points and will be scored by a committee of the MAA Missouri section. The committee consists of the following members: Mangho Ahuja (SEMO), Jim Bruening (SEMO), Hang Chen (CMSU), Curtis Cooper (CMSU), Joseph B. Dence (UMSL), Leon Hall (UMR), and Ilene Morgan (UMR). Some partial credit may be earned for substantially correct work toward a solution to the problem.

The registration fee is $40 per team. A complementary continental breakfast will precede the Friday morning competition. Each team member and the faculty sponsor are invited to a Friday pizza party at 11:30 am. Each team member is also invited to be a guest at the MAA Missouri Section Banquet on Friday night. At that time, the results of the competition will be announced. A traveling trophy will be awarded to the first place team. In addition, each member of the first place team will receive a plaque. Certificates will also be given to each participant in the competition.

Any questions about the competition can be sent to

Curtis Cooper
Department of Mathematics and Computer Science
Central Missouri State University
Warrensburg, MO 64093
(660) 543-8851
fax: (660) 543-8013
email: cooper@cmsu.edu

P.S. The Missouri Collegiate Mathematics Competition home page can be accessed directly with the URL
http://www.math-cs.cmsu.edu/~hchen/contest/

FROM THE GOVERNOR

I would like to express my appreciation for the support that you have given me as your new governor. I realize that I am following in the footsteps of respected colleagues who have been my professors in graduate school or with whom I have worked as fellow graduate students, members of the competition committee, chairs of my department, and other colleagues within the Missouri Section of the MAA. Thank you for the faith you have shown in me.

The meeting of the Board of Governors was held on August 9, 2006 in Knoxville, TN. As reported by Martha Siegel, Secretary of the MAA, in the August issue of *Focus*, the MAA is doing well. Our surplus is growing and we have added to our endowment. A new auditing firm has been hired and the 2005 audit was very positive.

Strategic planning is continuing and reports on the first three areas of study, revenue, professional development, and the American Mathematics Competitions, will be given to the Executive Board this fall and to the Board of Governors at the Joint Meetings in January. The next three areas of study have been designated as membership, students, and governance.

The renovation of the national office of the Association, known as the Carriage House, is nearing completion. The first conference is scheduled for October 2006 and the dedication of the building is being planned for April 2007 with almost a full week of events and lectures. When you are in Washington, D.C., please be sure to visit the historic buildings on 18th Street, N.W. that house the offices of the Mathematical Association of America.

The MAA is involved in several searches most notably of which are a Director of Publications for Journals and Communications and a Director of Marketing and Membership. (See the MAA webpage, http://www.maa.org/, for job descriptions.) Also, a search has begun for an Associate Director of Programs and Services for Student Activities.

Don Albers was recognized for his many years of work as Associate Executive Director of the MAA and as director of electronic services and publications. He has also provided leadership as editor of the *College Mathematics Journal* and was instrumental in the creation of *Math Horizons*.

A tenth SIGMAA, the SIGMAA for Mathematical and Computational Biology, has been approved by the Executive Committee, and another one, a SIGMAA for Mathematics and the Arts, is being formed.

The Fourth MAA Mathematical Study tour, a tour of China, was a great success, as was the Mexico trip last summer. A similar trip to Mexico is scheduled for winter break. Next summer's trip will celebrate the 300th anniversary of Euler's birth and trace his life in Europe.

Several board members attended their first Board of Governors meeting: Joe Gallian (President-elect), Carl Pomerance (First Vice President), Deanna Haunsperger (Second Vice President), Jeremy Kilpatrick, the Governor-at-Large for Teacher Education, and Peter Stanek, the Governor-at Large Representing Mathematicians in Business, Industry, and Government. In addition, Dan Maki (Budget Committee) and Nancy Hagelgans (Chair, Committee on Sections) were elected to second terms on the Executive Committee and the Board.

The following Section Governors were thanked for their service the past three years and the newly elected Section Governors were welcomed to the board.

Section	Outgoing Governor	Incoming Governor
Kansas	Elizabeth Yanik	Andrew Bennett
Missouri	Leon Hall	James Bruening
New Jersey	Reginald Luke	Patricia Clark Kenschaft
Northeastern	Laura Kelleher	Ockle Johnson.
Ohio	Thomas Hern	Judith Palagallo
Pacific Northwest	Robert Beezer	Nancy Ann Neudauer
Seaway	Luise-Charlotte Kappe	Robert Rogers
Southeastern	Benjamin Klein	Ellen Kirkman
Southwestern	William Stone	Janet McShane

John Kenelly was re-elected Treasurer, Camille McKayle was elected Governor-at-Large Representing Minorities replacing Nathaniel Dean, and Andy Liu was elected Governor-at-Large Representing Canadian Members replacing Jonathan Borwein. The new governors will assume their positions after the January 2007 meetings.

Future meeting sites are scheduled as follows:

2007 Joint Meetings	New Orleans, LA
2007 MathFest	San Jose, CA
2008 Joint Meetings	San Diego, CA
2008 MathFest	Madison, WI
2009 Joint Meetings	Washington, D.C.
2009 MathFest	Portland, OR
2010 Joint Meetings	San Francisco, CA
2010 MathFest	Pittsburgh, PA
2011 Joint Meetings	New Orleans, LA
2012 Joint Meetings	Boston, MA
2013 Joint Meetings	San Diego, CA
2015 MathFest	Washington, D.C.

Jennifer Quinn, Michael Starbird, and Gil Strang were approved as winners of the 2007 Haimo Awards. The winner of the Gung-Hu Award for Distinguished Service to Mathematics was also approved. Lynn Steen, former MAA President, was elected Leitzel Lecturer for MathFest 2007. Jennifer Chayes of Microsoft was selected as the Hedrick Lecturer for MathFest 2007. Arthur Benjamin of Harvey Mudd College was elected the Pólya Lecturer for 2006-07 and 2007-08.

The Board approved by-law changes for the Iowa, Kentucky, and the Southeastern Sections. At the last business meeting of the MAA in San Antonio, a bylaws change relating to the way that MAA members are assigned to sections was approved. (See MAA Online for this new bylaw.) In Knoxville, the Board of Governors approved a change in the Bylaws to make provision for removal from office following approval of an Ethics and Whistleblower Policy for the Association. The change will be voted on at the next Business Meeting of the MAA. (Again see MAA Online for this proposed change.)

The Missouri Section will be awarding a Meritorious Service Award for our section. Please consider colleagues in your department who have distinguished themselves with service to the MAA and to the Missouri Section. Please forward names of persons you would like to honor to Dr. Craig Haile, Chair, Missouri Section, at College of the Ozarks, or to me at Southeast Missouri State University. Thank you.

Jim Bruening
Missouri Section Governor

FROM THE CAMPUSES

Central Missouri State University

Ms. Ann McCoy joins the faculty as a Visiting Assistant Professor of Mathematics. Ann earned her bachelors and masters degrees from CMSU and has completed some work toward the Education Specialist. She has started work on a Ph.D. at UMKC. She was an elementary and middle school teacher from 1984-2003, primarily in Clinton. Since 2003 she has been a Regional Consultant and Assistant Director of the Missouri Mathematics Academy, a state-wide mathematics professional development program.

Dr. Mahmoud Yousef, Associate Professor of Computer Science, was granted tenure effective August 2006.

Ms. Martha Diehl, Instructor of Mathematics, retired in December 2005 after serving the university for more than 23 years.

In April 2006 **Dr. Sue Sundberg**, Professor of Mathematics, received the William H. Byler Distinguished Faculty Award. The Byler Award is named for William H. Byler, an inventor, author and teacher who graduated from CMSU in 1927 with a major in chemistry and physics. He established an endowment fund to provide annual recognition for distinguished faculty performance, evidenced by teaching, scholarly or creative activity and professional related service.

Dr. Terry Goodman, Professor of Mathematics, received the 2005 Outstanding Post-Secondary Teacher Award at the annual conference of the Missouri Council of Teachers of Mathematics.

Dr. Curtis Cooper, Professor of Computer Science, received the Arts and Sciences Outstanding Scholarly/Creative Activity Award for his work on finding the world's largest know prime number through the Great Internet Mersenne Prime Search project.

Another Large Prime Number Found - On September 4, 2006, the GIMPS team on the CMSU campus found the 44th known Mersenne prime number, less than 9 months after finding the 43rd one. **Dr. Curtis Cooper**, Professor of Computer Science, and **Dr. Steven Boone**, Interim Dean of the College of Arts and Sciences and Professor of Chemistry, head up the project on the local campus. The 44th Mersenne prime, $M32582657$, contains more than 9.8 million digits. A $100,000 prize is being offered for the discovery of a prime number with at least 10-million digits.

(Submitted by Ed Davenport)

Culver-Stockton College

We have a new tenure-track faculty member in our department, **Dr. Jing Chang**. She just completed her Ph.D. in statistics from SIU and joins our department as Assistant Professor.

Also **Dr. Fred Helsabeck**, Associate Professor, will be retiring from his full-time position at the end of this semester.

(Submitted by Gary G. Cochell)

Missouri State University

Kishor Shah was awarded a 2006 MSU University Research Award and **Xingping Sun** received a 2006 CNAS Teaching Award.

Cameron Wickham will be on sabbatical during Fall 2006.   **Shouchuan Hu** will be on sabbatical for Spring and Fall 2007.

Jorge Rebaza, Les Reid, and **Cameron Wickham** have been awarded an NSF Research Experiences for Undergraduate grant to support their project (http://math.missouristate.edu/reu/) in Summer 2007. Contingent on the availability of funds, additional support in years 2008 and 2009 is anticipated.

Larry Campbell (with **Terry Goodman**, CMSU) will continue as co-PI into the third year of their *Missouri Elementary Math Leadership Academy* project supported by US DOE through the Missouri Department of Elementary and Secondary Education."

Lynda Plymate and **Kurt Killion** (with other MSU science faculty) have been awarded a 3-year grant by the Missouri Department of Higher Education to conduct their *Science and Mathematics Achievement from Rural Teachers* project.

The second MAKO Undergraduate Math Research Conference (http://math.missouristate.edu/MAKO/) will be held on Saturday, November 11, 2006. Undergraduates from Missouri, Arkansas, Kansas, and Oklahoma are invited to present short talks on their research. This conference will be co-hosted by College of the Ozarks, Drury University, Evangel University, Missouri State University, and Southwest Baptist University.

The MCTM Elementary Math Contest and the Middle School Math Contest will be jointly held on Saturday April 28, 2007 on the MSU campus. It is anticipated that over 1000 children and parents/sponsors will participate in this event. For more information, contract David Ashley (DavidAshley@MissouriState.edu)

The 2007 Kappa Mu Epsilon National Convention will be held on the MSU campus on April 12-14, 2007. There will be a Friday April 13 banquet which will be held at Evangel University.   For more information, contact John Kubicek (JohnKubicek@MissouriState.edu).

(Submitted by Yungchen Cheng)

St. Charles Community College

Leon Jones retired at the end of the Spring 2006 semester.

Andy Stephan was hired as a new full-time faculty member beginning Fall 2006. Andy holds a MA from UM-St. Louis. He previously taught at Lewis and Clark College in Illinois and was an adjunct at SCC.

(Submitted by Wanda Long)

Saint Louis University

We have hired two new Assistant Professors: **Dr. Robert Huff** (Ph.D. 2003, Rice University) has most recently taught at Indiana University in Bloomington and **Dr. Ann McNamara** (Ph.D. 2000, Bristol University, England) joins us from Parks College. **Michael Goldwasser, Bryan Clair**, and **Greg Marks** have been promoted to Associate Professor.

(Submitted by Raymond W. Freese)

South East Missouri State

Dr. Paul Deiermann was tenured effective Fall 2006. **Drs. Pradeep Singh** and **W.Y. Chan** were promoted to Associate Professors effective Fall 2006. **Trenton Crews** and **James McEwen** were hired as full-time non-tenure track faculty beginning Fall 2006. **Laurie Overmann** was hired as a full-time term faculty member for academic year 2006-07.

The College of Science and Mathematics presented its Research Award to **Dr. Haohao Wang** and its Teaching Award to **Dr. Timothy Ray**.

The Show Me Undergraduate Math Conference will be held November 4, 2006. The conference is designed for undergraduate students to present mathematical research projects and expository papers, to meet with more established mathematicians, and to network with their fellow students. The featured speaker will be Dr. Michael Sullivan of Southern Illinois University-Carbondale. Complete details are available at the website http://cstl-csm.semo.edu/hwang/conference.htm

(Submitted by Vic Gummersheimer)

Southwest Baptist University

Dr. Kevin Hopkins ran a summer camp, "Math Contest Camp," in July 2006 on the campus of Southwest Baptist University. Twenty five campers attended this first time event and had a great time. Check out the website http://www.sbuniv.edu/~khopkins/2006mcc.html for information about the camp, including evaluation results. Plans for the future will be posted as those are finalized.

(Submitted by Kevin W. Hopkins)

Washington University in St. Louis

Last spring the Department hired three new faculty members, two of whom will be arriving this fall. **Jimin Ding** received her Ph.D. from University of California-Davis in 2006 under the guidance of Professor Jane-Ling Wang. She works in a modern form of survival analysis using techniques that will be generalizable to other areas of statistics. **Xiang Tang** received his Ph.D. from University of California-Berkeley in 2006, working with Professor Alan Weinstein. His areas of expertise include noncommutative geometry, symplectic geometry and quantization. He also worked on mathematical problems in statistical thermodynamics while still an undergraduate in China. In addition, **Roya Beheshti-Zavareh** accepted the offer of a position in our Department. She received her Ph.D. from MIT in 2003 working with Professor A.J. DeJong. She will spend this academic year at MSRI and arrive here in fall 2007. Her principal research area is Fano varieties in algebraic geometry.

Also joining us this fall a new Chauvenet Lecturer is **Geir Hjelle** (Ph.D., Norwegian University of Science and Technology, 2006). **Joost Berson** (Ph.D., University of Nijmegen, 2004) will be arriving as a Chauvenet Lecturer in spring 2007. Professor **Hrvoje Sikic**, from the University of Zagreb, Croatia, will be a year-long visitor in the department this year.

Professor **Steve Krantz** is on leave for 2006-2008, serving as Deputy Director of the Research Conference Center at the American Institute of Mathematics in Palo Alto, CA. Professor **Rachel Roberts** is on leave for the fall 2006 semester, and Professor Jack Shapiro will be away in spring 2007.

This fall the department will have 8 new Ph.D. students, and 3 new MA students (two of them in statistics). These join 37 continuing graduate students of whom, we anticipate, about 10 will receive degrees this year.

(Submitted by Ron Freiwald)

The **MAA Missouri Section Newsletter** is published in October, March, and May each year. Please send any news, comments, questions or corrections to me at **setourville@ccis.edu**.

Thanks.

Suzanne Tourville
Newsletter Editor

MISSOURI SECTION
OF
THE MATHEMATICAL ASSOCIATION OF AMERICA

ABSTRACT FOR CONTRIBUTED PAPERS

Name(s) (* means Speaker): _____

Institution: _____

Address: _____

_____

Phone: (_____) _____

Email: _____

PAPER TITLE: _____

BRIEF ABSTRACT OR DESCRIPTION OF PAPER:

_____

_____

_____

_____

_____

AMS SUBJECT CLASSIFICATION (see Math. Subj. Class.) _____

SPECIAL ACCOMMODATIONS NEEDED (Overhead projector, computer, etc.):

_____

Is the speaker a student? _____
Is the presentation directed toward a student audience? _____

PLEASE RETURN THIS FORM BY **FEBRUARY 1, 2007**, TO:

>Craig Haile
>Department of Mathematics
>College of the Ozarks
>P.O. Box 17
>Point Lookout, MO 65726

Or email haile@cofo.edu