# MAA MISSOURI SECTION NEWSLETTER FALL 2007 • VOLUME 28 • NUMBER 1

## **2008 MAA Missouri Section Meeting**

The **Mathematics Department** of the Missouri State University in Springfield is looking forward to hosting the **Spring Meeting of the Missouri Section of the Mathematics Association of America** on Friday April 18 and Saturday April 19, 2008 (with the Missouri Collegiate Mathematics Competition beginning the evening of Thursday April 17). Contact Yungchen Cheng at <u>YungchenCheng@MissouriState.edu</u> 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:

Yungchen Cheng Department of Mathematics Missouri State University Springfield, MO 65897

Or e-mail to YungchenCheng@MissouriState.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, 2008.** 

### From the Chair

We look forward to having you join us at next year's meeting on Missouri State University's campus. More information about the meeting will be provided as time gets closer. I am glad to report that Joe Gallian, the MAA President, has accepted our invitation to speak at our meeting. If you would like to recommend an individual as another invited speaker at the meeting, please don't hesitate to let me know as soon as possible.

I would also like to encourage you to consider nominating someone for our Section's Award for Distinguished College or University Teaching of Mathematics. We understand that it takes time to put together a nomination packet, but perhaps it will be worthwhile at the end if a deserving individual is recognized because of your effort.

If there is an item or two that you would like the Executive Committee to look into before the next business meeting, please don't hesitate to write me.

It goes without saying that Jim Bruening's passing is a great loss to our Section, and he will be missed by all of us for all the wonderful things that he contributed and, above all, for his friendship!

Yungchen Cheng

### Newsletter Editor and Web Page Administrator Nominations

Nominations for the positions of Newsletter Editor and Web Page Administrator are now being accepted. Each is a 3-year position.

Please send nominations to the Section Chair Yungchen Cheng at <u>YungchenCheng@MissouriState.edu</u>. 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 five years are listed below for your convenience. If your campus would be willing to host a Spring Meeting, please contact Yungchen Cheng, Chair, or any other member of the Executive Committee.

- 1997 Missouri Western State College
- 1999 Rockhurst College
- 1998 Southwest Missouri State University
- 2000 Central Missouri State University
- 2001 U. of Missouri-Rolla
- 2002 Truman State University
- 2003 Washington University
- 2004 Southeast Missouri State University

- 2005 Missouri Western State College
- 2006 University of Missouri-Columbia
- 2007 College of the Ozarks
- 2008 Missouri State University
- 2009 Truman State University
- 2010 University of Central Missouri
- 2011 University of Missouri-St. Louis
- 2012 Northwest Missouri State University

## **Section Teaching Award**

#### STATE YOUR INTENTION TO NOMINATE BY NOVEMBER 26, 2007.

Nominations for the 2008 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 2008 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 <u>MSHEPRD@nwmissouri.edu</u> by November 26, 2007.

### The deadline for the submission of all materials remains February 1, 2008.

### 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 <u>MSHEPRD@nwmissouri.edu</u> stating your intention to nominate by November 26,2007.
- Nominations must be submitted on the "**Nomination Form**" found on the Missouri Section web page at <u>http://www.maa-mo.org/teachingaward/teachingaward.html.</u> 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, 2008. 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

# **Contest at Forest Park**

Excellence in Mathematics

The 37th annual Excellence in Mathematics Contest cosponsored by the Mathematics Educators of Greater St. Louis and St. Louis Community College at Forest Park will be held on November 10, 2007, at the St. Louis Community College at Forest Park campus. Grades 9-12 are eligible to compete. Trophies and ribbons are awarded to the top individuals and teams. Two \$1000 Loeb/MEGSL scholarships along with a copy of *Mathematica* will be awarded to the top scoring senior in Divisions I and II. Mementos and certificates of participation will also be distributed to every participant. To pre-register or obtain more information please contact Ev Corich at 314-644-9241 or visit www.stlcc.edu/fp/math/contest.

# **Missouri Collegiate Mathematics Competition**

The thirteenth Missouri Collegiate Mathematics Competition will be held Thursday, April 17, 2008 and Friday, April 18, 2008 on the campus of Missouri State University in Springfield, 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. Some partial credit may be earned for substantially correct work toward a solution to the problem. The team earning the highest total points is the winner. In case of a tie, the committee will vote to determine the winning team.

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 University of Central Missouri Warrensburg, MO 64093 (660) 543-8851 fax: (660) 543-8013 email: cooper@ucmo.edu

P.S. The Missouri Collegiate Mathematics Competition home page can be accessed directly with the URL <a href="http://www.math-cs.ucmo.edu/~hchen/contest/">http://www.math-cs.ucmo.edu/~hchen/contest/</a>

# FROM THE GOVERNOR

### In Memoriam

Dr. Jim Bruening, 58, passed away on September 9, 2007. Jim completed his degrees at UMR and taught at Southeast Missouri State University for 22 years. In addition to being Governor of the Missouri Section, Jim was problems editor, with Shing So, of the *College Math Journal* and organizer of Math Field Day at Southeast 20 years. Survivors include his wife, Fay; a son, Aaron Bruening (Cristie) with granddaughter, Austyn; a daughter, Sarah Stock (Mike). Memorials may be made to the Dr. James T. Bruening Memorial Scholarship Fund or to Trinity Lutheran School Building Fund.

Thanks to Vic Gummersheimer for sending in this announcement. I am aware of two obituaries that may be of interest. The MAA published one in the current issue of *Focus*. You can find it online at <u>http://www.maa.org/pubs/october07web.pdf</u> or at the Missouri Section website www.maa-mo.org. The other appeared in his local paper and can be found at <u>http://www.semissourian.com/story/1257245.html</u>. Here, where I usually put comments from the Governor, I have included a few comments that were sent in about Jim.

As a former student of Dr. James Bruening, it deeply saddens me to learn of his passing. Dr. Bruening was not only an instructor to many of his students but he also was a mentor and friend. As my advisor in graduate school, Dr. Bruening provided the extra encouragement I needed to finish my degree. Having completed the course work in 1997, I put off completing my degree until 2000 because I had to write a paper. Dr. Bruening spent extra hours in his office helping me review, revise, and rewrite that paper. Furthermore, he helped me study for my comprehensive exams. Even though some of my former professors had retired or passed away, Dr. Bruening made sure that I had study guides for the exams. I will be eternally grateful for all the time and effort Dr. Bruening gave to me during my stay at Southeast Missouri State University. I do not remember if I ever told him thank you for his assistance. The hardest thing for me is that I never got to say good-bye to my former advisor. Dr. Bruening will be missed by his friends, colleagues, and former students.

Respectfully submitted,

James N. Adair Asst. Professor, Mathematics Dyersburg State Community College

Jim was Newsletter Editor during most of the years I was Secretary-Treasurer. He was easy to work with in getting the minutes published and submitting receipts for printing and postage. However MAA was not my first association with Jim. He was a graduate student and TA at UMR when I was an undergraduate. As the instructor for my section of Calculus III, he already had the makings of a fine teacher.

Susan Callahan

## FROM THE CAMPUSES

### **University of Central Missouri**

**Ann McCoy** has been selected to fill a tenure track position as an assistant professor in the Department of Mathematics and Computer Science. Ann earned her bachelors and masters degrees from UCM and currently is working 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.

(Submitted by Ed Davenport)

### **Culver-Stockton College**

Dr. Fred Helsabeck, Associate Professor of Mathematics, is retiring at the end of this current semester.

(Submitted by Gary G. Cochell)

### **Missouri State University**

Kishor Shah was awarded a 2007 MSU Foundation Award in Teaching.

Shouchuan Hu is on sabbatical in Fall 2007.

Jorge Rebaza was granted tenure and promoted to Associate Professor effective Fall 2007.

John Kubicek and Xiang Ming Yu retired in Summer 2007.

Jorge Rebaza, Les Reid, and Cameron Wickham are continuing the second year of their NSF Research Experiences for Undergraduate grant (<u>http://math.missouristate.edu/reu/</u>) to help promote undergraduate research.

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

The third **MAKO Undergraduate Math Research Conference** (<u>http://math.missouristate.edu/MAKO/</u>) will be held on Saturday, November 10, 2007. 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. For more information, contact Yungchen Cheng (<u>YungchenCheng@MissouriState.edu</u>)

The **MCTM Elementary Math Contest** and the **Middle School Math Contest** will be jointly held on Saturday April 26, 2008 on the MSU campus. It is anticipated that over 800 children and their parents/sponsors will participate in this event. For more information, contract David Ashley (<u>DavidAshley@MissouriState.edu</u>)

(Submitted by Yungchen Cheng)

Rockhurst University

We've had a busy year at Rockhurst. There were three retirements: John Koelzer, Merrill Goldberg, and Anita Salem. We have two new department members: Mairead Greene and Zdenka Guadarrama.

(Submitted by Keith Brandt)

### St. Charles Community College

We have two new hires for Fall 2007: **Joshua Niemczyk** who received his MA from UMSL and **Cheryl Eichenseer** who received her MA from SLU. Also, **Rich Christianson** was promoted to Professor.

(Submitted by Wanda J. Long)

### **St. Louis University**

We are saddened to report the loss of Professor **James Dowdy**, who passed away in 2006. Professor Dowdy completed his doctorate in mathematics at Oklahoma State University in 1969 and spent many years in the Department of Mathematics at West Virginia University before moving to St. Louis University in 1994.

Professor **Raymond Freese** retired from active teaching in 2007 after 45 years of service at St. Louis University. Professor Freese supervised 19 Ph.D. students and has authored more than forty research papers to date. His research involves the study of the geometry of metric spaces.

**Darrin Speegle** was promoted to Professor during the Spring 2007 semester. Professor Speegle joined the department in 1997 after receiving his Ph.D. at Texas A&M University. His research focuses on the areas of wavelet theory and Banach spaces.

(Submitted by Brody Johnson)

### Southeast Missouri State University

**Dr. Timothy Ray** is on sabbatical leave during this academic year. He will be with the National Security Agency in Washington, D.C.

The **Show Me Math Undergraduate Conference** will be held on November 3, 2007. Undergraduate students at all levels are invited to discuss their work. A poster room will be provided for those who would like to display their work in a poster, whether they are presenting or not. This conference is open to anyone interested in undergraduate mathematics. We will provide limited financial support to students. The deadline to apply for support is October 20, 2007. Complete details are available at <a href="http://cstl-csm.semo.edu/hwang/conference.htm">http://cstl-csm.semo.edu/hwang/conference.htm</a>

The Mathematics Department is offering two full time tenure track positions in statistics and mathematics beginning August 1, 2008. Full details are available at <a href="http://www2.semo.edu/provost/faculty/positions/">http://www2.semo.edu/provost/faculty/positions/</a>

(Submitted by Vic Gummersheimer)

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 <u>setourville@ccis.edu</u>.

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:
AME SUDJECT CLASSIEICATION (see Math. Sub. Class.)
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, 2008, TO:
Yungchen Cheng Department of Mathematics Missouri State University Springfield, MO 65897

Or e-mail to YungchenCheng@MissouriState.edu.