

# MAA MISSOURI SECTION NEWSLETTER

## WINTER 2007 • VOLUME 28 • NUMBER 2

### 2007 MAA Missouri Section Meeting

The **Mathematics Department** of the **College of the Ozarks** in Pont 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). Full information about the meeting can be found at [www.cofu.edu/maa](http://www.cofu.edu/maa).

The registration fee is \$12.00 if you register by March 18, or \$15.00 if later. [Please use the online site to register](#). (There is no registration fee for students, both graduate and undergraduate.) Tickets for the March 30 banquet cost \$15.00 each. Students participating in the Collegiate Mathematics Competition may attend the banquet free of charge. Banquet reservations cannot be guaranteed if received after March 15. If you are a department chair or MAA liaison and wish to attend the Saturday, March 31st, breakfast meeting, please include an additional \$8.00.

You may pay for registration at the meeting, or if you wish, send payment with ATTN: MAA meeting to

Craig Haile  
Department of Mathematics  
P.O. Box 17  
Point Lookout MO 65726

Please make all checks payable to College of the Ozarks.

#### Speaker Abstracts and Bios

**Tim Ray** will present *Truth and Fairness*: A look at what truth means in various realms (and what is true as a result), and how to divide that last piece of dessert.

**Tim Ray** is in his fourteenth year at Southeast Missouri State University after receiving his Ph.D. from Iowa State University. Before graduate school, he spent six and a half years working as a data processor and programmer in geophysical oil exploration. Tim and his wife Mary will celebrate 25 blessed years of marriage this spring, along with their six children: Nicole, Nathan, Noah, Noelle, Natalie and Naomi.

**Deanna Haunsperger** will present *Bright Lights on the Horizon*. What do a square-wheeled bicycle, a 17<sup>th</sup>-century French painting, and the Indiana legislature all have in common? They appear among the many bright stars on the mathematical horizon, or perhaps, more correctly in the *Math[ematical] Horizons*. *Math Horizons*, the undergraduate magazine started by the MAA in 1994, publishes articles to introduce students to the world of mathematics outside the classroom. Some of mathematics' best expositors have written for *MH* over the years; here are some of the highlights from the first ten years of *Horizons*.

**Dr. Deanna Haunsperger** is a professor of mathematics at Carleton College in Minnesota. Since her own undergraduate days at a small liberal arts college in Iowa, she has been interested in increasing the number of students who pursue advanced degrees in mathematics. That passion has guided her as a former co-editor for *Math Horizons* (the Mathematical Association of America's magazine for undergraduates) and as co-founder and co-director of Carleton's Summer Mathematics Program for Women (a successful, intensive four-week summer program to encourage talented undergraduate women to pursue advanced degrees in the mathematical sciences). Currently she is serving as the Second Vice President of the MAA and chairing the MAA's Strategic Planning Committee on Students. Deanna is married to fellow mathematician Steve Kennedy, and together they have two children.

## 2007 Spring Meeting Schedule

### Thursday

7:30pm - 10:00pm Collegiate Mathematics Competition (2nd Floor Youngman Agriculture Building)

### Friday

8:30am - 11:00am Collegiate Mathematics Competition (2nd Floor Youngman Agriculture Building)

11:00am - 5:00pm Registration (Keeter Center US Bank Foyer)

12:45pm - 1:00pm Welcome, Dr. Jerry Davis, President of College of the Ozarks. (Keeter Center, Royal Oak Auditorium)

1:00pm - 1:50pm Matthew S. Mayo, Director, Center for Biostatistics and Advanced Informatics, Kansas Masonic Cancer Research Institute, University of Kansas Medical Center (Keeter Center Royal Oak Auditorium)

2:00 - 5:00pm Displays, Exhibits, MAA book sale (Keeter Center US Bank Foyer)

2:00 - 3:00pm Contributed Papers (Royal Oak Auditorium, Forsythe, Mitchell, Clark, and Goode Rooms)

3:00 - 4:00pm (MAT)<sup>2</sup> Meeting

4:00 - 5:00pm Contributed Papers (Royal Oak Auditorium, Forsythe, Mitchell, Clark, and Goode Rooms)

6:30 - 8:30pm Banquet. [Tim Ray](#), Southeast Missouri State University, [Truth and Fairness](#) (Keeter Center Silver Dollar City Parlor)

### Saturday

6:15 - 7:00am 5k Run/Walk

7:30 - 8:30am Breakfast meetings of Department Chairs and MAA Liaisons (Keeter Center Herold Dining Room)

8:00 - 10:00am Registration, Displays, Exhibits, MAA book sale

8:45 - 9:45am Contributed Papers (Royal Oak Auditorium, Forsythe, Mitchell, Clark, and Goode Rooms)

10:00 - 10:50am [Deanna Haunsperger](#), MAA Second Vice-President, Carleton College, [Bright Lights on the Horizon](#) (Keeter Center Royal Oak Auditorium)

11:00 - 11:50am Business Meeting (Royal Oak Auditorium)

## Accommodations

Blocks of rooms have been reserved at the College of the Ozarks Keeter Center Mabee Lodge (where the meeting is being held), at the College of the Ozarks Good Center motel (just down the hill from the Keeter Center), and at the Comfort Inn near the Branson Meadows Factory Mall. Mention Missouri MAA to get the quoted rates.

Mabee Lodge and Good Center (417) 239-1900 [www.keetercenter.edu](http://www.keetercenter.edu)

Presidential Suites (2 bedrooms, 1 King bed each) \$215.40

Loft Suites (1 King) \$135.20

Skyline View Suites (2 Queen) \$127.20

Good Center: Deluxe Rooms (2 Queen) \$59

Comfort Inn at Branson Meadows (417) 335-4731 [www.myerhotels.com](http://www.myerhotels.com) \$59-\$69/night

Other local lodging (no rooms reserved) can be found at [www.cofo.edu/maa/accommodations.html](http://www.cofo.edu/maa/accommodations.html)

## 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](mailto: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 **March 1, 2007**.

## 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 **by March 1** (email: [haile@cofo.edu](mailto: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	<b>2007</b>	<b>College of the Ozarks</b>
1994	Missouri Southern State College	2008	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

The MAA Board of Governors met January 4, 2007 in New Orleans, Louisiana. MAA President Carl Cowan presided. I (Leon Hall) represented the Missouri Section because Jim Bruening was not able to attend.

The Association is going through a strategic planning process. For this meeting, three of the Strategic Planning Working Groups presented final reports. These were the Working Groups on (1) American Mathematics Competitions, (2) Professional Development, and (3) Revenue. In addition, the Working Group on Governance and the Working Group on Students presented preliminary reports. I have copies of these reports, which I will pass on to Jim at our Section Meeting this spring. Any of you who want to look at any or all of these reports are welcome to do so – just send me an e-mail. For instance, there is a part of the preliminary report on Governance that deals with the sections and our relationship to the national MAA organization. Is the relationship between the Missouri Section and national MAA one-sided one way or the other, and if so, how can better balance be achieved? The MAA has 29 sections, some representing a single state, like Missouri, and others representing two or more states (or parts of states). Should the section structure be reviewed and possibly reorganized? Reports from the other groups dealt with other interesting issues.

Financially, MAA continues to do well. Treasurer John Kenelly’s “financial spectrum” for MAA now stands at 10-6-8-6, meaning we have a budget of \$10 million, \$6 million in investments, buildings worth \$8 million, and \$6 million in grant expenditures. For those of you who remember my report on the January 2006 Board meeting will note that the investments figure has decreased from 7 to 6. This is mainly due to expenses associated with the recent extensive remodeling of the Carriage House at MAA headquarters. That project carried a price tag of \$2.5 million and began about three and a half years ago. During that time the MAA’s investment portfolio has essentially stayed constant. John has a goal of 10-10-10-10 and feels that we are making good progress towards that goal.

Another thing that I mentioned in my January 2006 report was dues restructuring. By now you have experienced the first step in the four-year process when you got your dues notice for 2007. As I said last year, Retired Members would feel the increase the most in 2007 dues, but I still believe that you are getting good value for your dues, and let me remind you that the first year’s increase was the most, so the worst is over. For 2008, the dues will be \$185 for a Regular member taking the *Monthly*, and \$259 for a Regular member taking all three of the *Monthly*, the *CMJ*, and *Math. Mag.* Members in the Regular Discounted category (professional income \$60,800 or less) will pay \$148 with the *Monthly*, \$222 for all three. For Retired members, the corresponding rates will be \$93 and \$167. The complete dues structure for 2008 will be available at MAA Online (maa.org) later. Right now the 2007 numbers are being shown.

This summer’s MathFest will be August 3-5 in San Jose, CA; dates and locations for future Joint Meetings and MathFests are

2007	San Jose, CA	MathFest	August 3-5
2008	San Diego, CA	Joint Mtngs	January 6-9
2008	Madison, WI	MathFest	July 31 – August 2
2009	Washington, DC	Joint Mtngs	January 7-10
2009	Portland, OR	MathFest	August 6-8
2010	San Francisco, CA	Joint Mtngs	January 6-9
2010	Pittsburgh, PA	MathFest	August 5-7
2011	New Orleans, LA	Joint Mtngs	January 5-8
2012	Boston, MA	Joint Mtngs	January 4-7



2013	San Diego, CA	Joint Mtngs	January 9-12
2014	Baltimore, MD	Joint Mtngs	January 15-18
2015	Washington, DC	MathFest	August 5-8
2015	San Antonio, TX	Joint Mtngs	January 10-13

Last year I asked about the location of our section flag, and it was found, and if you were at the Section Business Meeting last spring you saw it. This was and is not to imply that the flag was lost just because I didn't know where it was - apparently it was safe and sound in Springfield all the time. I also asked any of you who have information that would be appropriate for the history of our section that Susan Callahan and I are working on to please get in touch with one of us. Both these topics arise from looking ahead to the 2015 MathFest, at which there will be a parade (thus the flag) and by which time a history of the section is expected. As at last spring's meeting, either Susan or I will be giving talks occasionally at our section meeting as we make progress on the history project.

Last year I also reminded you that part of your MAA dues could be used as a charitable contribution if you itemize deductions on your taxes, and pointed out that your annual renewal notice has a receipt at the bottom that gives the correct amounts to use, depending on your membership category. **THINGS HAVE CHANGED.** Well, not changed, but it turns out that we were never supposed to count any of our MAA dues as a charitable contribution. MAA had incorrectly interpreted IRS rules. **Do not use the portion of your dues listed on your 2007 dues receipt as a charitable contribution.** Anything extra, such as a Voluntary Dues Supplement, can still count as a charitable contribution, but not any of the regular dues. Regular dues can be deducted as a business expense. If you have counted them as a charitable contribution before, it is probably not necessary to file an amended return because the amount is relatively small, but of course I am no tax advisor, and should not have dipped my toe in that pool last year! There was a notice about this in the November 2006 issue of *Focus*, page 35.

The Carriage House Conference Center project at MAA headquarters is essentially finished, and official opening ceremonies are being planned for April 19-21, 2007. If you are in Washington, DC then you would be most welcome to attend. Go to [http://www.maa.org/maahq\\_construction/index.html](http://www.maa.org/maahq_construction/index.html) for more information.

The American Mathematics Competitions continue to be successful. Participation in AMC 8 last fall was slightly higher than in 2005, and the AMC 10 and AMC 12 contests that will be held this February have registrations of about 250,000 at 4,500 schools, which is consistent with the numbers for recent years. The AMC has materials for teachers to use with their students at all AMC exam levels. These materials include practice problems and more. A new item is a CD containing copies of all AMC 8, AMC 10, and AMC 12 exams since 2001 *plus* the AIME and USAMO exams since 2001. It is called the *21<sup>st</sup> Century Contests* disk and costs \$20. If you want one, get in touch with the AMC office in Lincoln, Nebraska.

The Board elected Richard Cleary of Bentley College, Waltham, MA, to the Audit and Budget Committee. The other person on the ballot for this position was our own Mary Shepherd. Don't feel too bad that Mary was not elected - if she had been she probably would have resigned as Missouri Section Secretary/Treasurer.

It will soon be time for our section to review and amend, if necessary, the Missouri Section Bylaws. The MAA Committee on Sections suggests that each section thoroughly review its bylaws every ten years and has set up a rotation schedule for the reviews. Missouri is slated for review in 2009-2010. A document which can be used as a template, *Model for MAA Section Bylaws* has been created (see <http://www.maa.org/sections/guidelines/bylaws.html>) and the bylaws for the other MAA sections are available at MAA Online.

Leon Hall, for Jim Bruening

## FROM THE CAMPUSES

### Southwest Baptist University

Our math department hosted math contests, Jan. 27 and Feb. 3. We had 624 students, 3rd-8th grade, from 48 schools attend these contests.

**Dr. Kevin Hopkins** received the 2006 Faculty Life Beautiful Award. This award is among the highest honors that SBU bestows upon a faculty member. Recipients of the Faculty Life Beautiful Award are selected by a University-wide balloting process under the supervision of the Provost, and the balloting involves all eligible faculty. Criteria for the award include "Christ-like behavior in family, school, church, and social interactions," "participates actively in worship and service in a body of Christian believers," "exhibits a Christ-like lifestyle in his or her personal and daily life."

**Dr. Kevin Hopkins** is planning Math Contest Camp 2007. Information on the camp is available at <http://www.sbuniv.edu/~khopkins/2007mcc.html>. This will be the second year the camp has occurred. In summer 2006, the first year, 25 campers came and had a great time at the camp.

(Submitted by Kevin W. Hopkins)

The **MAA Missouri Section Newsletter** is published in October, February, and May each year. Please send any news, comments, questions or corrections to me at [setourville@ccis.edu](mailto: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 **MARCH 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](mailto:haile@cofo.edu)