2009 MAA Missouri Section Meeting

The **Mathematics Department** of the **Truman State University** in Kirksville is looking forward to hosting the **Spring Meeting of the Missouri Section of the Mathematics Association of America** on Friday April 17 and Saturday April 18, 2009 (with the Missouri Collegiate Mathematics Competition beginning the evening of Thursday April 16). Full information about the meeting can be found at http://maa.truman.edu.

A new feature at the Section Meeting this year is a **poster session**. The posters will be on display in the Violette Hall 1200 block at the same time as the talks. To submit an abstract for a poster, just use the same submission form for contributed talks and specify POSTER SESSION in the Special Needs section.

The registration fee is $12.00 if you register by April 10, or $15.00 if later. Please use the online site to register. (There is no registration fee for students, both graduate and undergraduate.) A parking permit for Friday will be needed. If you would like to request one, please indicate this on the registration form and register **no later than April 10** so that we can mail the permit to you in time.

Tickets for the April 17 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 April 10. If you are a department chair or MAA liaison and wish to attend the Saturday, April 18, breakfast meeting, please include an additional $8.00.

You may pay for registration at the meeting, or if you wish, please print out your confirmation email and send payment no later than April 10th to:

David Garth
Department of Mathematics and Computer Science
Truman State University
100 E. Normal
Kirksville, MO 63501

Please make all checks payable to Truman State University. Please do not send payment after April 10.

Call for Nominations

Nominations for the positions of Governor, Student Chapter Coordinator, and Public Information Officer are now being accepted. Each is a 3-year position which begins after the April 2009 meeting. Please send nominations to the Section Chair David Garth at dgarth@truman.edu. Nominations will be forwarded to the nominating committee.

Contributed Talks

We are now accepting abstracts for contributed talks. All talks are 20 minutes in length, including question and answer time. To be guaranteed space on the schedule, please submit your abstract by March 20. Talks 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.

You may use the online registration form to submit an abstract for a talk. Feel free to use standard LaTeX commands in your abstract. You may also submit your abstract by email to David Garth at dgarth@truman.edu.

Please include all of the following information: 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 20, 2009.**

A schedule of talks will appear about two weeks before the conference.

2007 Spring Meeting Schedule

Thursday

7:30pm - 10:00pm	Collegiate Mathematics Competition (Georgian Room B and C, Student Union Building)

Friday

8:30am - 11:00am	Collegiate Mathematics Competition (Georgian Room B and C, Student Union Building)
	Project NExT Meeting (Violette Hall 2110)
11:00am - 5:00pm	Registration (Violette Hall Foyer)
12:45pm - 1:00pm	Welcome, Dr. Doug Davenport, Dean, College of Arts and Sciences. (Violette Hall 1000)
1:00pm - 1:50pm	Invited Address, Ivars Peterson (Violette Hall 1010)
2:00 - 5:00pm	Displays, Exhibits, MAA book sale (Violette Hall 1436)
2:00 - 5:00pm	Contributed Papers (Violette Hall, 1200 Block)
2:00 - 5:00pm	Poster Session (Violette Hall, 1200 Block)
6:30 - 8:30pm	Banquet. Shing So, University of Central Missouri, (Georgian Room B and C, Student Union Building)

Saturday

6:15 - 7:00am	5k Run/Walk
7:30 -8:30am	Breakfast meetings of Department Chairs and MAA Liaisons (Spanish Room, Student Union Building)
8:00 - 10:00am	Registration, Displays, Exhibits, MAA book sale (Violette Hall 1436)
8:45 - 9:45am	Contributed Papers (Violette Hall, 1200 Block)
10:00 - 10:50am	Invited Speaker, Ivars Peterson (Violette Hall 1000)
11:00 - 11:50am	Business Meeting (Violette Hall 1000)

Keynote Speaker Biography

Ivars Peterson is Director of Publications for Journals and Communications at the Mathematical Association of America in Washington, D.C. For more than 25 years previously, he was a writer at *Science News*. He also served as editor of *Science News for Kids* and *Science News Online* and wrote the weekly online column *Ivars Peterson's MathTrek*.

Ivars Peterson received his education from the University of Toronto, where he earned a Bachelor of Science degree (majoring in physics and chemistry) and a Bachelor of Education degree. He taught high school science and mathematics for eight years. In 1980, he left teaching to obtain a master's degree in journalism from the University of Missouri in Columbia. He served as an intern at *Science News* in Washington, D. C., then joined the weekly magazine's staff.

Peterson's first book, *The Mathematical Tourist: Snapshots of Modern Mathematics* (W.H. Freeman, 1988; rev. ed., 1998), was widely and favorably reviewed. He followed up that success with *Islands of Truth: A Mathematical Mystery Cruise* (W.H. Freeman, 1990), *Newton's Clock: Chaos in the Solar System* (W.H. Freeman, 1993), *Fatal Defect: Chasing Killer Computer Bugs* (Times Books, 1995), *The Jungles of Randomness: A Mathematical Safari* (Wiley, 1998), *Fragments of Infinity: A Kaleidoscope of Math and Art* (Wiley, 2001), and *Mathematical Treks: From Surreal Numbers to Magic Circles* (Mathematical Association of America, 2002).

He has collaborated with his wife, Nancy Henderson, on two books introducing selected topics in contemporary mathematics to children of middle-school age: *Math Trek: Adventures in the MathZone* (Wiley, 2000) and *Math Trek 2: A Mathematical Space Odyssey* (Wiley, 2001). For more than 10 years, he wrote the "Math Page" column for the children's magazine *Muse*.

In 1991, Ivars Peterson received the Joint Policy Board for Mathematics Communications Award recognizing him for his "exceptional ability and sustained effort in communicating mathematics to a general audience."During the spring semester of 2008, Ivars Peterson served as the Basler Chair of Excellence for the Integration of the Arts, Rhetoric, and Science at East Tennessee State University in Johnson City, where he taught a course on "Communicating Mathematics." He lives in Washington, D.C., with his family.

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 David Garth, Chair, or any other member of the Executive Committee.

2000	Central Missouri State University	2007	College of the Ozarks
2001	U. of Missouri-Rolla	2008	Missouri State University
2002	Truman State University	**2009**	**Truman State University**
2003	Washington University	2010	University of Central Missouri
2004	Southeast Missouri State University	2011	Columbia College
2005	Missouri Western State College	2012	University of Missouri-St. Louis
2006	University of Missouri-Columbia	2013	Northwest Missouri State University

Hotel Accomodations

The hotels listed below have blocks of rooms reserved for conference attendees. To guarantee a room at the listed rates, make your reservation by the listed cutoff date. When making your reservation, use the confirmation code MOMAA. The Bed and Breakfasts have not held rooms for the conference. To get the conference rate at the Brashear House, use the confirmation code MAA. No confirmation code is needed for the Cottage Grove Bed and Breakfast.

Hotel Accommodations				
Hotel	**Phone**	**Address**	**Price**	**Cutoff Date**
Days Inn	(660) 665-8244	3805 S Baltimore St	$55 king or 2 dbl	April 2
Super 8	(660) 665-8826	1101 Country Club Drive	$50	April 2
Holliday Inn Express	(877) 863-4780	2702 South Franklin	$69.00 2 queen, single king, single queen, kitchenette suite with sofa sleeper	March 16
Comfort Inn	(660) 665-2205	2209 N. Baltimore	$94.99-$114.99	March 26
Cottage Grove Bed and Breakfast	(660) 627-4444	301 S Cottage Grove Ave	$69 for one person, $79 for two	None
Brashear House Bed and Breakfast	(660)627-0378	1318 E. Normal	$68	None

Missouri NExT Spring Program
Call for applications from first time participants.

The Spring 2009 Meeting for the Missouri NExT Fellows will be a Friday morning workshop, on April 17, 2009 at Truman State University, in Kirksville, Missouri, just prior to the Spring Missouri Section meeting. At the workshop, the Fellows will have a chance to interact with one another while attending sessions dealing with different aspects of our profession. After the workshop, the Fellows will attend the regular Section meeting and participate in the opportunities and activities the meeting will provide.

It is anticipated that contact between fellows will continue through the year, both electronically and in person. Fellows will be linked in an electronic network with one another and with a number of distinguished teachers of mathematics.

Possible topics for future discussion include methods of teaching, using technology and writing in the classroom, effective assessment and evaluation practices, mathematical resources on the web, applying for grants, tenure and promotion issues, interdisciplinary programs, assessment issue, and balancing faculty members' roles as teachers and scholars and human beings with personal lives! Topics this year will include discussions about preparing for tenure, and undergraduate research—how to create a culture of undergraduate research and how it is valued.

SUPPORT: Expenses for the Friday morning program including breakfast and lunch, and full registration costs for the Missouri Section Spring meeting will be covered for new Fellows. The remainder of the expenses should be covered by the Fellows' home institutions. However some funds may be available for accommodation costs in cases where the Fellow's home institution is not able to cover these costs (see application form). Financial support for this program is provided by the Missouri Section of the MAA and by another grant.

For more information: http://web.missouri.edu/~aubreyja/mo_next.html

TO APPLY: Send completed Application form for New Participants by April 4, 2009 to

Mary Shepherd,
Secretary/Treasurer, Missouri Section and temporary Missouri NExT Organizer
Department of Mathematics and Statistics,
Northwest Missouri State University,
Maryville, MO 64468.
Phone: (660) 562-1205, Fax: (660) 562-1188,
E-mail: msheprd(at)nwmissouri(dot)edu

Missouri Collegiate Mathematics Competition

The fourteenth Missouri Collegiate Mathematics Competition will be held Thursday, April 16, 2009 and Friday, April 17, 2009 on the campus of Truman State University in Kirksville, 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 $90 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.

Registration forms can be found at the contest website: http://www.math-cs.ucmo.edu/~hchen/contest/ Registration should be completed by **Monday April 13, 2009.**   Contact Curtis Cooper for more information at cooper@ucmo.edu.

FROM THE GOVERNOR

The MAA Board of Governors met January 4, 2009 in Washington, DC. MAA President Joe Gallian presided.

It was noted that the two-year term of President Gallian will end after the meeting and David Bressoud would assume the Presidency then.

Secretary Martha Siegel noted that, while the Working Groups of the Strategic Planning had provided comprehensive guidelines for improvement in their specific areas, the work of implementation, judging the budgetary implications of changes, and the ultimate responsibility for progress rests with MAA committees and MAA staff. Even though we want to move ahead on recommendations in the strategic planning reports that had been presented to the Board, the financial situation in the country had affected the MAA and thus all recommendations must be greeted with economic realities.

The MAA National Election will be held in April and May 2009. We will be selecting a President-Elect and two Vice Presidents. You are encouraged to take part in this opportunity to influence the future of the MAA. All members for whom the MAA has an email address on file by February 20, 2009 will receive an email ballot only. Members for whom the MAA does not have an e-mail address on file will not receive an email ballot and will receive a paper ballot **only if they have specifically requested it**. So, this is a great opportunity for all members to make sure MAA has their correct email address on file. To update your personal contact information, go to https://www.maa.org/EbusPPRO/Admin/Tabs/tabid/71/Default.aspx.

Data was provided to show that the total attendance in the summer 2008 MathFest dropped slightly (2%) from the year before (from 1431 to 1402).

The Treasurer's section on the website (http://www.maa.org/treasurer/) is now open in the members-only section. This section will be updated once a year when a new audited balance sheet arrives, and it will contain the items such as audited balance sheet, investment policy statement, monthly differences in investment accounts, list of endowed funds and dollar amounts,. Treasurer John Kennelly commented that the quality and dedication of the MAA's finance team had enabled the MAA to ride out the current financial difficulties so far. However, he noted that the MAA had gone through several years of deficits and it has to stop. He did recognize the fact that the MAA staff had already started this process.

According to Kennelly, the MAA investment portfolio has had some serious declines. In the third quarter we took a half million dollar hit. For the year, the drop has been $823K from the recent gains. However, our losses have been smaller when compared with others. Still, we need to continue studying our future investment program carefully and maintain a strong Investment Committee with extensive financial experience. The Budget Committee, chaired by Rick Cleary, also commented on the current operating budget by suggesting that, to effect a significant change in the operating budget, the MAA would need to make changes in the way it operates. Revenues for 2008, particularly from book sales and membership, may have been adversely impacted by some of the IT problems associated with the change of management software. They are starting to improve.

The Strategic Planning Working Group on Meetings reported that most MathFest 2008 (MF) participants would like invited talks to be expository talks on mathematics (either on undergraduate math or mathematical research) and more contributed talks to focus on pedagogy, connecting different areas of math, information about graduate school, and a really cool proof of a well known result. They also suggested that we should provide opportunities for graduate students to give talks at MF and a career panel for them, and give undergraduate students opportunities to give expository talks, information about graduate school, and games like Jeopardy.

The Strategic Planning Working Group on Periodicals and Communications reported their planned activities such as developing a SWOT analysis on periodical publications, researching periodicals policies of peer organizations on print vs. electronic delivery and on connections between membership and receipt of periodicals, collecting data on periodical use and preferences, researching financial implications of changing frequency of some publications or developing some publications on the web, experimenting with offering reduced membership fees for receiving journals only electronically, etc.

The Strategic Planning Working Group on Sections reported their SWOT analysis. Strengths include grassroots characteristic of sections, allowing every U.S. and Canadian member to belong to a section, and services provided and programs administered by the Washington office to the sections. Some weaknesses are the geographic or membership size of some sections, activities limited to one annual meeting in some sections, lack of Association support for development of section leadership, lack of communication between sections, and limited communication between the Association and sections. Some opportunities are joint section meetings with regional parts of other associations (such as AMS) and the large number of mathematicians inactive in the sections. One main threat to some sections is the declining faculty attendance.

The Strategic Planning Working Group on STEM Issues has received 440 responses to their survey in October 08 for the purpose of identifying issues related to math education, resources available to MAA, and resources for course development and enhancement. They are in the process of digesting this information.

Executive Director Tina Straley outlined the steps taken to reduce the budget deficit: tightening operation expenses and cutting selected programs and services. However, because of lost revenues in various areas, the 2009 budget is still projected to have a deficit of $226K. Suggestions to improve the budget situation include revising membership options to reduce processing costs, progressing toward electronic memberships and overall online access to publications to reduce printing/mailing costs, diversifying marketing strategies for books for less dependence on paper catalogs but reaching more potential customers, and outsourcing IT functions to increase accessibility and reliability. On the subject of Bylaws Revision, she suggested that the bylaws should lay out the big picture of how MAA operates and details should be left to the Board of Governors. By being able to make procedural changes without changing the bylaws, for example, it could help greatly to clean up the membership issues (e.g. categories, benefits). Among other things, the Carriage House (http://www.maa.org/meetings/MAA_conference_center.html) is being well used and the revenues have increased each year. Member subscriptions for College Mathematical Journal (down 6%) and Mathematics Magazine (down 7%) are low and not sustainable. The issue of Horizons as a member benefit must be addressed. Electronic-only memberships are a critical issue. The MAA website (http://www.maa.org) has many new features and the reactions have been positive. Math Alerts (by e-mail) has been well received. The number of book titles has increased and the pipeline is very full; we have emphasized textbooks and classroom resource materials (about 37% of overall sales) which have a higher number of sales. The number of colleges and universities serving as AMC test sites is growing. We also want to start positioning the MAA to have an influence over legislation with the new Congress and Administration. For example, how do we help translate the STEM issues into policy initiatives? A panel discussion on how mathematicians can influence public policy was held at the JMM 2009.

Currently funded projects: MAA Distinguished Lecture Series (NSA) (www.maa.org/dist-lecture), MAA Regional Undergraduate Mathematics Conferences (NSF-DMS) (www.maa.org/rumc) , MAA SUMMA Research Experiences for Undergraduates (NSA, NSF) (www.maa.org/nreup) MAA Professional Enhancement Program (PREP)(NSF) (www.maa.org/prep), MAA Preparing Mathematicians to Educate Teachers (PMET)(NSF, Texas Instruments) (www.maa.org/pmet). A grant from the National Security Agency will continue funding both undergraduate and graduate students' travel to MathFest 2009.

The final reports of Cycle I and II Strategic Planning are available at
https://www.maa.org/ecomtpro/members/sp/index.cfm?loc=index2.cfm.
The topics currently under review as part of Cycle III of Strategic Planning are STEM Issues, Sections, Meetings, and Periodicals and Communications.

The 2009 American Invitational Mathematical Exam I and II will be held on March 17 and April 1 respectively. The 2009 USA Mathematical Olympiad will be on April 28 and the Mathematical Olympiad Summer Program is tentatively scheduled for June 9 to July 3.

As the overall journal circulation continues to decline, one possible source of additional income is the possibility of providing digital collections of selected articles from the MAA journals, on demand. The number of views of the digital editions of the journal has been growing steadily, especially for the Monthly. For 2009, to reduce costs, MAA Focus will be published bimonthly (January, February-March, April-May (meeting issue), August-September, October-November (meeting issue), and December-January).

We have an MAA Video channel on YouTube (http://www.youtube.com/maavideo) with excerpts from presentations at the Carriage House. Forthcoming are videos of MAA events and possibly video abstracts by journal/magazine authors. There are also two blogs:
        MAA NumberADay (http://maanumberaday.blogspot.com/) and
        MAA MinuteMath (http://maaminutemath.blogspot.com/).

The MAA Textbooks (MMAT) series now have 32 volumes, and the Classroom Resources Materials (CRM) series have 27 volumes, including titles in differential geometry, combinatorics, graph theory, number theory, history of mathematics, mathematics for business decisions, Fourier series, modeling, topology, real analysis, Lebesgue integration, and non-Euclidean geometry.

Two Bestsellers among the MAA books in 2008: Math through the Ages, Number Theory Through Inquiry (both in the MAA Textbook series). Two other textbooks we have been promoting are Graph Theory and Mathematical Interest Theory.

The MAA has a maximum of about 22,000 members at year's end and a minimum of about 17,000 members shortly thereafter. Most memberships are currently on a calendar-year basis (regular - 27%, discounted – 44%, retired – 19%), but there are also many on an academic-year basis (institutions – 2%, students – 5%). (Note: the Missouri Section currently has about 300 MAA members.) Among the members, 66% are male and 20% are female, with 14% unknown. By age: 20-29: 4%, 30-39: 11%, 40-49: 16%, 50-59: 21%, 60-69: 25%, 70-79: 14%, 80 & over: 9%.   The international marketplace has become a piece of the MAA and could be where our true potential lies.

The new Mathematical Sciences Digital Library (MathDL http://mathdl.maa.org/) was inaugurated in July 2008, combining the old MathDL and Math Gateway. It will become MAA's pathway to resources in the National Science Digital Library (NSDL http://nsdl.org/). The new site continues most of the old Math Gateway functions including daily Math in the News articles, On This Day (in mathematics), and the My library features for registered users. Three online publications form the old MathDL, the Journal of Online Mathematics and Its Application (JOMA), Digital Classroom Resources (DCR), and Convergence are consolidated into a single new online publication Loci. The new Loci also provides access to an archive copy of Communication in Visual Mathematics.

Yungchen Cheng

Dates and locations for future Joint Meetings and MathFests are

2009	Portland, OR	MathFest	August 6-8
2010	San Francisco, CA	Joint Meetings	January 13-16
2010	Pittsburgh, PA	MathFest	August 5-7
2011	New Orleans, LA	Joint Meetings	January 5-8
2011	Lexington, KY	MathFest	August 4-6
2012	Boston, MA	Joint Meetings	January 4-7
2012	Madison, WI	MathFest	August 2-4
2013	San Diego, CA	Joint Meetings	January 9-12
2014	Baltimore, MD	Joint Meetings	January 15-18
2015	San Antonio, TX	Joint Meetings	January 10-13
2015	Washington, DC	MathFest	August 5-8

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.**

Suzanne Tourville
Newsletter Editor