

MAA MISSOURI SECTION NEWSLETTER WINTER 2016 • VOLUME 35 • NUMBER 2

From the Chair (Lori McCune)

2016 MAA Missouri Section Meeting

The Department of Computer Science, Mathematics, and Physics at Missouri Western State University is pleased to be hosting the Spring Section Meeting on Friday, April 8, 2016 and Saturday, April 9, 2016 (with the Missouri Collegiate Mathematics Competition beginning the evening of Thursday, April 7). MAA President Francis Su from Harvey Mudd College will be visiting the section and speaking. Polya Lecturer Erica Flapan from Pomona College will also be giving an invited talk. Thomas Marley from the University of Nebraska-Lincoln will be our third invited speaker.

Registration and more information about the meeting are available on the meeting webpage, <http://staff.missouriwestern.edu/users/gwaters/momaa/MOMAAwebsite2016.html>.

Registration fees are discounted \$5 for registrations received before March 18, 2016.

Suggestions for the meeting are welcome and may be directed to Section Chair Lori McCune (lmccune@missouriwestern.edu).

Call for papers

You are invited to present at the Spring Meeting. Presentations should be 15-20 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 students in presenting papers at the meeting.

The online abstract submission form is available on the meeting website. Submissions online are preferred; however, there is a form for contributing a presentation at the meeting on the last page of this newsletter for those unable to submit their abstracts online. You may attach a scanned

copy of the completed form and email to lmccune@missouriwestern.edu (please put “MAA Abstract” in the subject line) or send to the address on the form.

We will have space for student posters to be presented at the meeting on Friday. Students are invited to submit poster abstracts using the Abstract Submission Form on the meeting webpage.

Deadline for submissions is **March 18, 2016**.

From the Governor (Mary Shepherd)

Board of Governor’s Report

The January 2016 Board of Governors (BoG) meeting was held, as usual, the day before the Joint Mathematical Meetings began in Seattle, Washington. Now, Seattle in January is not really my idea of the ideal place to hold the winter meetings, but we had some beautiful weather during that time, and it was an escape from the more frigid Missouri temperatures.

As I look back and reflect on the BoG meeting two big items come to mind. First, and probably most important for the next couple of years, the MAA will be restructuring its governance system. Currently, the Board of Governors has to approve just about any action the MAA would like to take. The Executive Council (about 10 people) does make many of the recommendations that the BoG approves. While this is not a bad thing, it does mean that the MAA can be slow to respond to various dynamics affecting it. A taskforce has been looking into various governance structures for at least a couple of years and it appears we will be moving toward a governance structure with a smaller Board, somewhat like the current Executive Council, that will have the authority to act and will be able to respond more quickly when situations require. But the representative group like the current Board of Governors (about 51 members) will become an advisory “Assembly” (probably not the final name for this group), and will retain some authority, but not at its current level. A group will be working out the details on this over the next 6 months to a year. This is a significant change and will require a vote by the membership of the MAA to take effect. I believe it is not anticipated that a change will occur for at least 1.5 to 2 years. Anyone who has some comments or would like more details, please contact me.

The second standout item from the January BoG relates to an initiative led by current MAA president Francis Su to better understand our membership. Some of the questions being asked are: Who is joining the MAA? Who is not? Who joins and then allows his/her membership to lapse? Why? How can we harness the digital revolution? Can we create membership benefits related to technology? What about underrepresented groups? If you have suggestions or comments about any of these questions, please pass them along to me. We spent considerable time in the January BoG meeting working in focus groups on some of these topics.

And then, I attended just the very first part of the Section Officers' Meeting. The topic being discussed? Reaching out to faculty at our two-year institutions where many (dare we say most) students in the nation take their initial college level mathematics courses. Recalling the mission of the MAA—to advance the mathematical sciences especially at the collegiate level—it seems really appropriate to encourage membership from students and faculty at two-year institutions. This is not to take away from AMATYC (or locally MOMATYC), but a message that we should really be working together.

Other items from the January BoG of probable interest, the dues for 2016 will not increase. The 2016 dues schedule is as follows:

- Member-Plus: \$249.00
- Member: \$175.00 if paid as a lump sum or \$180.00 with monthly installments of \$15.00
- Student: \$35.00

The new departmental memberships appear to be fairly popular. The increase in members, particularly student members, has been significant. Has your department become a departmental member? If you have other questions about concerns you have been following that I did not address in this report, just let me know.

Respectfully submitted,
Mary Shepherd
Missouri Section Governor

Missouri Mathematics Pathways Taskforce Update

For about 1.5 years, faculty from each of the 27 institutions of higher education in Missouri (both 2-year and 4-year) have been engaged in looking at how we can help more students in Missouri complete some form of quality higher education credential. We spent a year analyzing the factors affecting this from policy at the state level to various perceived (and actual) institutional barriers and in June 2015 issued a report identifying 8 recommendations. The report is available at <http://dhe.mo.gov/documents/MathPathwaysReport.pdf>

Recently Missouri was selected as one of 5 states to be supported by The Charles A. Dana Center at the University of Texas as we implement pathways over the next 3 or more years. Over the next several months, and years, you will be hearing more about the process and what you can do at your university. So that you can begin to see what this might entail, at our April 2016 section meeting (and at the corresponding meeting of MOMATYC the same weekend) some of us will be leading a session where you can find out more details, bring your questions and be part of the discussion. To prepare for this discussion and so that you have a little background, we ask that you read the short report, Modernizing Mathematics Pathways at Texas Universities at http://www.utdanacenter.org/wpcontent/uploads/modernizing_mathematics_pathways_at_texas_universities.pdf.

You are welcome to read our state report with recommendations mentioned above, too. We want this to become a “joyful conspiracy” as we work to empower our students with mathematics that is appropriate and relevant to their chosen field of study. Come join us in St. Joe, see what is going on and become part of our Joyful Conspiracy.

Mary Shepherd
Co-Chair, Missouri Mathematics Pathway Taskforce

Missouri Collegiate Mathematics Competition (Curtis Cooper)

The 21st Missouri Collegiate Mathematics Competition will be held 7:30pm - 10:00pm, Thursday, April 7, 2016, and 8:30am - 11:00am, Friday, April 8, 2016 on the campus of the Missouri Western State University.

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 received by Monday April 4, 2016. 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 official website of the Contest is:

<http://www.math-cs.ucmo.edu/~hchen/contest/>

Additional information, registration forms and past contests can be found at that site or at:

<http://cs.ucmo.edu/~cnc8851/contest/problems.html>

Section NExT (Samuel Chamberlin and Azadeh Rafizadeh)

We are pleased to announce the Spring 2016 Missouri Section NExT meeting in St. Joseph, MO 4/7-4/8. Our events will run parallel to the Missouri Collegiate Mathematics Competition.

We will have a reception Thursday night 4/7, starting at 7:30 pm.

Our spring workshop will occur Friday, April 8, 8:30-11 am.

Our presenters this year are Francis Su, Benediktsson-Karwa Professor of Mathematics at Harvey Mudd College and President of the Mathematical Association of America, and Erica Flapan, Lingurn H. Burkhead Professor of Mathematics at Pomona College and 2016-2017 Polya lecturer. We would also like to remind you that both of our presenters have won national teaching awards.

Given the caliber of our speakers this year, we hope that you will be able to find the time and resources to attend our workshop, and that you will invite your junior faculty colleagues to come and listen to these wonderful mathematicians and educators talk to us in an intimate setting!

If you have any questions or concerns, please do not hesitate to contact us. We are looking forward to seeing you in St. Joseph!

Best regards,

Azadeh Rafizadeh (rafizadeha@william.jewell.edu)
Samuel Chamberlin (samuel.chamberlin@park.edu)

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 several years are listed below for your convenience. If your campus would be willing to host a Spring Meeting, please contact Lori McCune, Chair (lmccune@missouriwestern.edu), or any other member of the Executive Committee.

- 2016 Missouri Western State University
- 2017 Missouri Southern State University
- 2018 Drury University
- 2019 Lindenwood University
- 2020 University of Central Missouri
- 2021 Truman State University
- 2022 University of Missouri – Kansas City

From the Campuses:

Culver-Stockton College (submitted by Gary Cochell)

Culver-Stockton College hosted the AMC 10B/12B contests on February 17, 2016.

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

*Dan Daly
Newsletter Editor*

**MISSOURI SECTION OF
THE MATHEMATICAL ASSOCIATION OF AMERICA**

ABSTRACT FOR CONTRIBUTED PAPERS

Author(s) : _____

Presenting author: _____

Presenter is: faculty _____ a graduate student _____ an undergraduate student _____

Institution: _____

Address: _____

Phone: (_____) _____ Email: _____

Paper Title: _____

Abstract: _____

Is the presentation directed towards a student audience? _____

All presentation rooms are equipped with computers and projectors or presenters can connect their own laptop computers to use projectors. Rooms will also have chalk boards.

You may attach a scanned copy of the completed form and email to lmccune@missouriwestern.edu (please use "MAA Abstract" in the subject line) or send by regular mail to

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The deadline for submissions is **March 18, 2016**.