# MAA MISSOURI SECTION NEWSLETTER Spring $2015 \cdot$ VOLUME $34 \bullet$ NUMBER 2 

## From the Chair (Robert Roe)

## 2015 MAA Missouri Section Meeting

The 2015 Spring meeting of the Missouri Section of the MAA will be hosted by Missouri University of Science and Technology Department of Mathematics and Statistics. Presentations will be in the Butler-Carlton Civil Engineering Building while the Missouri Collegiate Mathematics Competitions and the banquet will be held in the Haverner Center on the campus of Missouri S\&T.

The Missouri Collegiate Mathematics Competition will begin on the evening of Thursday, March 26, continuing on the morning of Friday, March 27. The conference will begin on the afternoon of Friday, March 27 and last until midday Saturday, March 28.

The plenary speakers are Steve Dunbar, University of Nebraska - Lincoln - "Olympiad Problems for Fun, Learning and Research with Dynamical Software", Angie Hodge - University of Nebraska - Omaha - "Inquiry-based learning: What, when, where, why, and how?" and Martin Bohner - Missouri S\&T - The Beverton-Holt Quantum Difference Equation.

Registration, accommodation, transportation, and schedule information are available at http://web.mst.edu/~rroe/MAA2015.htm. Note that the symbol before the rroe should be a tilde, not a minus or dash.

2015 is the centennial year for the MAA. The national offices have requested that we get plenty of pictures and video of activities at the section meeting to share at MathFest this coming summer. Those with ability and equipment are encouraged to help record memories of this meeting not only for the national meeting and also for our own future meetings.

Presentations
You are invited to present at the Spring Meeting. Presentations will be 15 minutes in length and may be on research topics of 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. Students are particularly encouraged to make presentations and faculty members are urged to assist student in presenting papers at the meeting.

If you would like to present at the meeting, submit your abstract through the conference website, or by emailing to maa2105@mst.edu. Please use "MAA abstract" in the subject line. Deadline for submissions of abstracts is March 16, 2015.

## News from Section Officers meeting at the JMM

I attended the MAA Section Officers meeting at the Joint Math Meetings the past January in San Antonio, Texas. They were encouraging sections to plan something special at their section meetings to celebrate the centennial of the MAA. We have plans to had a Jeopardy contest at the section meeting where the answers will be from the history of the Missouri section so start studying! See: http://sections.maa.org/missouri/history.html

The MAA has created new section banners for each section. These will be on display at MathFest this summer and sections will be able to take their banner home afterwards.

Departmental MAA memberships will be changing in the future. With the purchase of departmental membership all of the department's undergraduate and graduate students will become student members of the MAA. I am not sure exactly when this will take place. There will be some increase in the cost of the departmental membership and the cost will also be based on the size of the department. The membership will come with electronic copies of MAA periodicals. Hard copies can still be purchased at an additional cost.

## From the Governor (Susan Callahan)

The Board of Governors met on January 9, 2015, in San Antonio, Texas. During the course of the day we heard reports from MAA officers, MAA staff, and various committees and councils. We approved a large number of recommendations relating to committee issues. I will elaborate on some topics and list other actions.

## Centennial Celebration

MathFest 2015 will be the MAA's centennial celebration meeting. The meeting will be four days long instead of three days and, along with the other usual lectures and addresses, will include six MAA Centennial Lectures in place of the typical three MAA Invited Addresses. Other events being planned include the Centennial Reception, a display of section flags, a showing of the centennial video, a vaudeville night, a music event and a theater event. MathFest 2015 will be held August 5-8, 2015, in Washington, DC. Also, a centennial publication will accompany the April issue of Focus.

CUPM
The printed version of the 2015 CUPM Curriculum Guide to Majors in the Mathematical Sciences will be published in early 2015. Some sections of the report are still in preparation but the rest are currently available online at www.maa.org/cupm.

## Second Century Campaign

All members are encouraged to donate to the Greater MAA Fund as part of this campaign. Your support will help the MAA achieve its core goals. At the JMM it was announced that $\$ 175,000$
had been donated in 2014. Of the 51 governors, 29 have donated a total of $\$ 19,600$. The goal is to raise $\$ 7,000,000$ over a five-year period ending December 2016.

## An Honor

The Carriage House (located behind MAA Headquarters in Washington, DC) was recognized by Unique Venues magazine as the "Best Venue to Meet with Fewer Than 100 People."

## Membership/Dues

2016 dues for individual members were set as:
\$249 for Member-Plus
$\$ 175$ for Member (regular) This can be paid as a lump sum, or as 12 monthly installments of $\$ 15$, totaling $\$ 180$.
\$35 for Student
The Board of Governors approved a new structure for departmental membership. The new departmental membership includes one full MAA membership, unlimited student memberships, and discounted WeBWork hosting for instructors in the department. The amount of dues a mathematical sciences department will pay depends on the institution's total enrollment and the department's PhD-granting status, as shown in the table:

| Total Enrollment | Non-PhD Granting | PhD Granting |
| :---: | :---: | :---: |
| $<7,000$ | $\$ 500$ | $\$ 750$ |
| $7,000-19,999$ | $\$ 700$ | $\$ 1000$ |
| $20,000+$ | $\$ 900$ | $\$ 1500$ |

Before the vote for approval there was much discussion of this dues structure. Many Governors expressed concern that the fees were high and that no print journal was included. The dues structure was proposed by the Membership Committee and was intended to focus on and engage students.

## Requests for Input

The MAA welcomes input from members on the following:

- Committee Membership-Recommendations for membership on MAA committees may be submitted on a survey monkey form at https://www.surveymonkey.com/s/T2PB535. Self-nomination is permitted. Appointments for committee terms beginning in 2016 will be made in April of this year.
- Awards, Prizes, and Lectures-Members may nominations. Information on the various awards can be found at http://maa.org/programs/maa-awards.
- American Mathematical Monthly Editor-The MAA hopes to identify candidates for the next editor this spring. Those interested in applying can find more information at http://maa.org/news/american-mathematical-monthly-editor-search- 0 . Also nominations for editor may be submitted directly to Barbara Faires, MAA Secretary.


## Common Vision Project

Stakeholders in the mathematical sciences have developed a number of curricular guides. This project aims to find common themes and to articulate a shared vision for modernizing undergraduate mathematics. The common vision will be communicated to the mathematical sciences community. Work on a report for the project is underway. A draft of the report will be
revised, etc. at a workshop in May 2015. The Common Vision project is organized by the MAA and supported by the National Science Foundation.

## Committee Restructuring

The Board approved replacing three committees (Personnel; Compensation; Management, Evaluation, and Oversight) having similar membership and related responsibilities with just one committee. The charge of the new Committee on Personnel combines the charges of the previous three committees. Its members will the Treasurer (chair), the President, and either the President-Elect or the immediate Past President.

## Other Actions

The Board of Governors also:

- approved the minutes of the August 6, 2014 Board Meeting
- ratified the election of applicants to membership in the MAA
- approved the awarding of Meritorious Service Awards to the candidates nominated by six sections
- approved presenting the Mary P. Dolciani Award to Sybilla Beckmann at MathFest 2015
- approved presenting Henry L. Alder Awards to Allison Henrich, Patrick Rault, and Talithia Williams at MathFest 2015
- approved a revised charge for the Membership Committee
- approved a revised charge for the MAA-NCTM Committee on Mutual Concerns
- approved revising the membership of the Council on the Profession by adding an at-large position for inclusion
- approved a revised charge for the Committee on Technologies in Mathematics Education

Respectfully submitted,
Susan Callahan
MO Section Governor

## From the Secretary (Grant Lathrom)

## MISSOURI SECTION <br> THE MATHEMATICAL ASSOCIATION OF AMERICA BUSINESS MEETING MINUTES

March 29, 2014

## Meeting called to order by Bryan Clair.

1. Approval of Minutes from April 20, 2013 Business Meeting

Call to approve and seconded. Minutes approved.
2. Report on Run/Walk

Good weather no injuries and Aileen Murphy Won.

Documents about serving partner disciplines come out next year. Providing answers to questions such as, "What belongs in a mathematics major?" These will not be prescriptive and will provide learning outcomes for a mathematics major. Drafts will soon be available. Remember that MAA runs on volunteer power. Volunteers needed for positions at national level committees. Please
contact the Chair, Governor or Jennifer Quinn or nominate yourself online. We are seeing a decline in membership and activeness. The average age is going up rather than becoming younger, pointing to a need for younger members. Promoting membership to younger people is important. Encouraging younger mathematicians to attend various conferences and workshops is important as well. The web site is being updated and you can see lists of committees or subcommittees under "Great Ways to Connect." Be sure to login because content changes based on whether or not the user is logged-in. Such content includes a list of previous purchases from the MAA, being a member versus being a Member+ and online access to all MAA journals.
4. Secretary/Treasurer's Report-Grant Lathrom

Departments are highly encouraged to nominate members for the Section Teaching Award. We have had no nominations for this year. There are many outstanding teachers in our section whose skills are going unnoticed. Please nominate and recognize them.

## Missouri Section <br> of The Mathematical Association of America

Treasurer's Report
March 29, 2014

Beginning Balance on April 20, 2013
\$5,067.00

| Income | MAA Support to Section | $\$ 894.00$ |
| :--- | :--- | ---: |
|  | 2013 Spring Meeting Revenue | $\$ 6,735.00$ |
|  | Total Income: | $\$ 7,629.00$ |
| Expenses | Miscellaneous | $\$ 39.23$ |
|  | Miscellaneous | $\$ 254.18$ |
|  | 2013 Collegiate Math Competition | $\$ 403.49$ |
|  | Speakers | $\$ 200.00$ |
|  | 2013 Spring Meeting Expenses | $\$ 5,562.39$ |
|  | Boone County Bank Account | $\$ 746.20$ |
|  | Total Expenses | $\$ 7,205.49$ |

5. Missouri Section NExT Report-Gavin Waters/Ryan Mullen

Group has elected Ryan Mullen to take over position as chair. Group continues to have a fall meeting. Departments encourage new faculty to consider getting involved in Section NeXT.
6. Webpage Administrator Report—Scott Thatcher

Web page is functional and displaying current information. Any information which you would like displayed please let Scott know. Web address problems are being remedied.
7. Liaison Coordinator Report-Yungchen Cheng

Please email your liaisons about nominating committees and newsletters. The list of liaisons is on the web. Let Yunchgen know of modifications.
8. Nominations and elections-Yungchen Cheng

Student Chapter Coordinator-Al Dixon (C of O)
Newsletter Editor-Dan Daly (SEMO)
Secretary/Treasurer-Grant Lathrom (MSSU)
Chair Elect-Lori McCune (Missouri Western)
Move other nominations open. There were no other nominations. Move to confirm the slate. Slate confirmed.
9. Report from Rob Roe on Spring 2015 meeting at Missouri University of Science \& Technology.

Competition: March 26-27 $7^{\text {th }} \quad$ Meeting: March 27-28 ${ }^{\text {th }}$
Centennial meeting with Jeopardy games for history of MAA and the Missouri Section. These will be run by Illene Morgan.
10. New business-Bryan Clair

Move that the chair be congratulated for an excellent meeting. Congratulations to Mary for her tenure on the executive committee. Move to write letters of thanks to appropriate members of SLU for the meeting work.

Move meeting adjourn. So moved.

## Missouri Collegiate Mathematics Competition (Curtis Cooper)

The nineteenth Missouri Collegiate Mathematics Competition will be held 7:30pm - 10:00pm, Thursday, March 26, 2015, and 8:30am-11:00am, Friday, March 27, 2015 on the campus of the Missouri University of Science and Technology.

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 March 23, 2015. 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.

## Section NExT (Samuel Chamberlin and Azadeh Rafizadeh)

## Missouri NExT Spring Program March 26" and 27", 2015 Missouri University of Science and Technology

## DESCRIPTION:

The spring 2015 meeting of the Missouri Section of Project NExT (New Experiences in Teaching) will occur on March $26^{\text {th }}$ and $27^{\text {th }}, 2015$ at the Missouri University of Science and Technology in Rolla. Our events run in parallel to the Missouri Collegiate Mathematics Competition and end just prior to the spring Missouri Section of the Mathematical Association of America meeting. The meeting consists of a Thursday evening reception starting at 7:30pm Thursday March $26^{\text {th }}$, which is open to fellows (both sectional and national), candidates, mentors, consultants and guests. Then there will be a Friday morning workshop from 8:30-11am, which is open to fellows (both sectional and national), candidates, mentors, and consultants.

New fellows will be recognized at the conference banquet on Friday evening.

## Missouri NExT - Call for applications from first time participants

## APPLY TO BECOME A MISSOURI SECTION NExT FELLOW

The Missouri Section of Project NExT meets twice a year, during the spring MAA Section Meeting, and in the fall at the Kansas City Mathematics Technology Expo. Fellows will be assigned an experienced and successful mentor from outside their institution to provide them with guidance, perspective, and encouragement in their professional endeavors.

Contact between fellows continues through the years, both electronically and in person. Fellows are linked in an electronic network with one another and with a number of distinguished teachers of mathematics. Possible topics for future discussion at our meetings 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, and balancing faculty members' roles as teachers and scholars and human beings with personal lives!

SUPPORT: Light snacks and beverages at the Thursday evening reception and breakfast and lunch on Friday will be provided. The remainder of the expenses should be covered by the Fellows' home institutions. Financial support for this program is provided by the Missouri Section of the MAA.

## For more information or to apply contact either of the Co-Directors:

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

## The Missouri Section of Project NExT is in need of volunteer mentors for new fellows

Project NExT (New Experiences in Teaching) is a national program of the MAA (Mathematical Association of America) for new or recent doctorates in the mathematical sciences who are interested in improving the teaching and learning of undergraduate mathematics. The project aims to facilitate the professional development and integration into the profession of new mathematicians through a series of workshops and communication. The Missouri Section of Project NExT was set up in 2008, and has the additional goal of establishing links between the different types of institutions in Missouri and between graduate students and new faculty members in Missouri.

We are looking for volunteers to serve as mentors for our 2015 fellows. It is important for new faculty to receive one-on-one mentoring through their early years in order to grow professionally and succeed in their applications for promotion and tenure.

A mentor will be expected to keep in touch with their mentee throughout the year to provide guidance, perspective, encouragement and support. Fellows will be assigned mentors outside their institutions.

To become a mentor you should be a mathematics professor at a Missouri institution with tenure or at least six years of experience at an institution that does not grant tenure. If you are interested
in serving as a mentor, please email the following information to either of the co-directors:
Samuel Chamberlin samuel.chamberlin@ park.edu
Azadeh Rafizadeh rafizadeha@william.jewell.edu
Your name:
Your Institution:
Your Position:
Are you: Tenured or tenure does not exist at your institution.
Years you have taught at this institution:
Are you a: MO Section NExT Fellow/ National NExT fellow
If one of the above, what year fellow are you?
Professional areas of interest:

## 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 Robert Roe, Chair (rroe@mst.edu), or any other member of the Executive Committee.

2015 Missouri University of Science and Technology
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 Gray Cochell)

Culver-Stockton College hosted the AMC 10B and 12B exams on February 25.

# MISSOURI SECTION OF <br> THE MATHEMATICAL ASSOCIATION OF AMERICA 

ABSTRACT FOR CONTRIBUTED PAPERS

Author(s): $\qquad$
Presenting author: $\qquad$
Presenter is faculty $\qquad$ a graduate student $\qquad$ an undergraduate student $\qquad$
Institution: $\qquad$
Address: $\qquad$

Phone:( ) $\qquad$ Email: $\qquad$
Paper Title: $\qquad$
Abstract: $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Is the presentation directed towards a student audience? $\qquad$
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 or marker boards.

You may attach a scanned copy of the completed form and email to maa2015@mst.edu (please use "MAA abstract" in the subject line) or send by regular mail to:

MAA Spring 2015 Meeting c/o Robert Roe
Mathematics \& Statistics Department
400 W. $12^{\text {th }}$ St.
Rolla, MO 65409-0020
The deadline for submissions is March 16, 2015.

