

# **MAA MISSOURI SECTION NEWSLETTER**

## **Winter 2018 • VOLUME 37 • NUMBER 2**

### **From the Chair (Bob Robertson)**

#### **2018 MAA Missouri Section Meeting**

The Department of Mathematics and Computer Science at Drury University will host the Spring Section Meeting on Friday, April 6 and Saturday, April 7, 2018. The Missouri Collegiate Mathematics Competition will take place the evening of Thursday, April 5 and the morning of Friday, April 6. Information about fees, registration, early registration discounts, and abstract submission are available on the meeting website:

<http://www.drury.edu/math-and-computer-science/mathematical-association-of-america-meeting>

The invited speakers are the following:

#### **Plenary Speaker on Friday, April 6**

James Sellers, Pennsylvania State University

"Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series"

#### **Banquet Speaker on Friday, April 6**

Albert Dixon, College of the Ozarks

Winner of the 2017 MAA Section Teaching Award

#### **Plenary Speaker on Saturday, April 7**

Jeremy Martin, University of Kansas

"Planes, Hyperplanes, and Beyond: Combinatorics and Geometry in Higher-Dimensional Spaces"

Note that Friday's plenary speaker has changed since the fall newsletter.

#### **Call for papers**

We invite both faculty and students to present at the Spring Meeting. Presentations should be 15 minutes long and should focus on mathematics or mathematics education. Examples of presentation topics include but are not limited to current mathematics research, new courses that have been developed, and successful teaching techniques. Talks can be either research-oriented or expository in nature.

Many undergraduate and graduate students attend this meeting, and you are welcome to design your presentation for these students. Also, if you are advising a student who is doing research, please encourage the student to present and assist the student in preparing the presentation.

The abstract submission form is available on the meeting website. The deadline for submissions is **March 16, 2018**.

## **From the Section Representative (Mary Shepherd)**

This is my final report to you as your Section Representative. It has been my honor to represent you and work for the good of the MAA on your behalf.

I truly enjoyed the Joint Math Meetings in San Diego in January, not only because of the weather, but the energy and renewal I find at these meetings. I do hope some of you will plan to attend MathFest in Denver, August 1 – 4, 2018. Registration is now open. I plan to be there. It does not look like the title of this position will be changing back to Governor. The Congress is still split and I really think the name of Section Representative will remain and the respect the title Governor had will eventually transfer to the title Section Representative.

I think the biggest news from the national level is the release of the new Instructional Practices Guide. You can download it from the MAA website. I have been on the periphery of the work to create this companion to the CUPM Curriculum Guide and I encourage you to take a look at it, discuss it in your department, and try some of the suggested practices. There are short, easy to drop-in ideas as well as long range planning ideas.

There are also two new publication practices. I told you about the partnership with Taylor and Francis for the journals in my last report. The books part of the publications of the MAA are now being handled by the AMS. Specifically, books from MAA Press will now be published as an imprint of the AMS Book Program. These are major changes in how the MAA handles its publication activities. The good news is the editing and all the work to make sure the publication material remains at the high level we all expect from MAA publications remains the same. It is expected that this change will significantly help MAA's bottom line which has been in the red for over 10 years.

There are other changes at the national level that may be coming in the next year or so. One you might see soon relates to trying to articulate the Core Values of the MAA. A task force from the Congress has been working on this since JMM and you might see something by MathFest on that. As is usual, there are new officers for the Board of Directors, and one of them, the new President-Elect, has Missouri ties. Michael Dorff was at Missouri S & T several years ago, and is now at Brigham Young University.

The MAA is always looking for committee members. Right now, including me, there are only 5 Missouri section members on national committees. Maybe you would like to work on a committee or would know someone who would. The committees can be found on the MAA

website if you search for Councils and Committees. The committee suggestions nomination form is here:

<https://www.surveymonkey.com/r/CFJ56SG>. You may or may not get selected for a committee as the Board tries to have good diverse representation on committees, but do find one that interests you and nominate yourself.

What can you do to help introduce your students to the MAA? Have you thought about that? One thing is to look at a departmental membership. You can nominate all your students as student members and they get electronic access to all the MAA journals and magazines. And there are discounts to the department on many MAA services, also.

As I sign off for this last time, let me thank you one more time for allowing me to represent you and the Missouri Section for the past three years.

Mary Shepherd

## From the Secretary (Phoebe McLaughlin)

- **Section Teaching Award** – There is no nomination before the deadline, January 15, 2018.
- **2018 MAA Meritorious Service Award** – Congratulations to Leon Hall of Missouri S&T who is one of the award winners.

Here is the announcement from MAA Headquarters:

We are pleased to announce that the Board of Directors has approved the following as recipients of the 2018 Meritorious Service Award:

Dan Hrozencik, Illinois Section  
Dora Ahmadi, Kentucky Section  
Leon Hall, Missouri Section  
John Maceli, Seaway Section  
Mark Snavelly, Wisconsin Section

We hope that you will be able to join us at the 2018 MathFest in Denver, CO (August 1-4, 2018) and come to the Prize Session to celebrate all prize and award winners.

## Section NExT (Azadeh Rafizadeh and Samuel Chamberlin)

We would like to remind you about the spring 2018 Missouri Section NExT meeting at Drury University in Springfield, MO. Our events will run parallel to the Missouri Collegiate Mathematics Competition.

We will have a reception Thursday night, April 5, starting at 7:30 pm.

Our spring workshop will occur Friday, April 6, 8:30-11 am.

Our presenters this year are Albert Dixon, Professor of Mathematics at College of the Ozarks and last year's winner of the MAA Missouri Section's teaching award, and James Sellers, Professor of Mathematics at Penn State University. Titles and abstracts of their presentation are at the end of this article.

We hope that you have found being a fellow/mentor beneficial and rewarding. If this is the case, please **help us recruit fellows and mentors** by informing your colleagues of these opportunities.

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 Springfield!

Best regards,

Azadeh Rafizadeh ([rafizadeha@william.jewell.edu](mailto:rafizadeha@william.jewell.edu))

Samuel Chamberlin ([samuel.chamberlin@park.edu](mailto:samuel.chamberlin@park.edu))

**Dr. Dixon:**

Title: Teaching strategies that have worked for me (A reflection on 30 years.)

Abstract: An exposition on classroom strategies I have used that seem to be useful to my students. (E.g. Cards and the Game)

**Dr. Sellers:**

Title: Advising Mathematics Students Academically and Professionally

Abstract: For many mathematics faculty members, advising is a fundamental task. Yet, there is usually no training in this area for graduate students while they are earning their degrees. This was my personal experience as I left graduate school and became a college professor. With this in mind, my goal is to discuss a variety of issues surrounding advising of undergraduate students. This includes "pre-advising" (such as working with high school students and parents), advising of undergraduates considering a change to the mathematics major, advising of mathematics majors, and professional advising of mathematics students (as they look to their future after graduation). I will also share a variety of resources that will hopefully prove useful to you.

## Missouri Collegiate Mathematics Competition (Curtis Cooper)

The twenty-third Missouri Collegiate Mathematics Competition will be held

7:30pm - 10:00pm, Thursday, April 5, 2018, and 8:30am - 11:00am, Friday, April 6, 2018

on the campus of the Drury 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 2, 2018. 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.

## 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 Bob Robertson, Chair ([rroberts@drury.edu](mailto:rroberts@drury.edu)), or any other member of the Executive Committee.

2018	Drury University
2019	Lindenwood University
2020	University of Central Missouri
2021	Truman State University
2022	University of Missouri – Kansas City
2023	Missouri State University

## From the Campuses:

**Culver-Stockton College (submitted by Gary Cochell)**

We hosted the AMC 10B/12B contests on Feb. 15.

**Saint Louis University (submitted by Brody Johnson)**

The Department of Mathematics and Statistics began Fall 2017 under the leadership of a new chair, Dr. Bryan Clair, who joined the department in 2000. Dr. Clair has been involved in a variety of projects during his time at SLU, including Mathematics and the Art of M.C. Escher and, more recently, with the teaching of statistics with R.

Jim Gill, who joined the department in 2012, took over the graduate coordinator role and has led an initiative to increase involvement with the Math Alliance.

Two new faculty members were welcomed in Fall 2017. Dr. Elodie Pozzi, an analyst who conducted her doctoral work at the University of Lyon, came to SLU from the University of Bordeaux as a Visiting Assistant Professor. Dr. Seth Wolbert joined the department as a teaching postdoc after completing his Ph.D. at the University of Illinois in geometry.

This spring, the department has begun a colloquium lecture series, with invited speakers at the cutting edge of mathematical research. The lecture series was kicked off in grand fashion with a captivating lecture by the Wilfred R. and Ann Lee Konneker Distinguished Professor of Physics, Carl Bender, from Washington University in St. Louis. Upcoming lectures will be announced on the department's web page: <http://mathstat.slu.edu>.

*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](mailto: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 students \_\_\_\_\_

Institution: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

Paper Title: \_\_\_\_\_

Abstract: \_\_\_\_\_

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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 white boards.

You may attached a scanned copy of the completed form and email to [rroberts@drury.edu](mailto:rroberts@drury.edu) (please use “MAA Abstract” in the subject line) or send by regular mail to:

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**The deadline for submission is March 16, 2018**