

Allegheny Mountain Section of the Mathematical Association of America

Allegheny Mountain Newsletter

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Spring Section Meeting Duquesne University, April 7-8

Register now for the 2017 MAA Allegheny Mountain Section Meeting, to be hosted by Duquesne University. We are looking forward to an exciting collection of invited addresses, contributed talks from students and faculty, workshops, panel discussions, problem competitions, awards, a pizza party, and more. Thank you to our local organizer John Kern!

Online conference and talk registration is open now through March 31.

From the Governor: John Thompson



John Thompson,
U. of Pittsburgh at Johnstown

As many of you are aware, at the JMM in Atlanta, the MAA membership formally voted to accept the restructuring of the organizational side of the MAA. Thus, our section representatives will no longer possess the

fiduciary responsibilities for the Association. However, the section representatives will serve in the "Congress" and continue to fill the major role of setting the priorities and programs just as the governors did previously.

While the new Congress will not possess the fiduciary responsibilities, it is still important that the MAA community be aware of the financial situation of the Association. As I mentioned in a previous newsletter, the financial situation of the MAA has not been trending in the positive direction. Despite this, based on discussions both at the Board of Governors meeting and with members of the business staff, I am somewhat optimistic that this situation will improve.

I invite you to contact me (jwto1@pitt.edu) if you are interested

in serving on one of the many committees of the MAA. There is a concerted effort to form committees that are representative of the diversity (geographical, institutional size, and individual) of the Association so the more interested members that we have the better. Moreover, there is a strong desire to incorporate "new blood" into the system.

Finally, as my term ends, I want to thank you for allowing me to serve the MAA as a governor over the past three years. It has been a tremendous experience working with fellow MAA members from across the country and to represent our great section.

I look forward to seeing many of you at Duquesne!

From the Chair: James Sellers



James Sellers
Penn State University

In my previous "letter from the chair", I shared a number of thoughts regarding "transitions" within the MAA. I would like to continue that theme, but this time share several personal thoughts in this vein.

First, this is my last letter as the chair of the Allegheny Mountain Section of the MAA. My term as chair ends at the end of our upcoming Spring section meeting at Duquesne University. I have really enjoyed serving our section for the last two years. I know that I am not necessarily leaving a major "legacy" behind (although the other officers would probably tell you that my singular focus on holding the executive committee meetings at Hoss's is distinct to me!). Nevertheless, I count it a privilege to have been able to serve in this way, and I thank you for allowing me to do so. I am excited to see our chair-elect Tim Flowers move into the role of chair in the coming months as we enjoy a "peaceful transition of power". On a personal note, my heart is warmed

to see Tim take on this role since Tim was once an undergraduate student of mine (several years ago - we're not actually saying how many!). I feel a bit like a parent "passing the baton" to one of his children. And it's a great reminder to me of the impact that I (and you) have on our students.

For those of you wondering, "so is James just going to drop off the MAA map for a while?", wonder no more. I will continue to be active in leadership in the MAA, with an eye to our section as well as the national Association. And just in case you haven't yet heard, I look forward with much anticipation to the opportunity to serve as the next Secretary of the MAA. (This plan was finalized by the Board of Governors at the Joint Mathematics Meetings earlier this year.) As many of you know, our very own Barbara Faires, a long-time member of the Allegheny Mountain Section of the MAA, has served the MAA diligently as Secretary for the last several years. Barbara's term as Secretary will end on February 1, 2018. Over the course of the next several months, I will "shadow" Barbara with the goal of learning as much as I can from her. (I greatly appreciate everything that she has already shared with me!) Barbara is to be applauded for all that she has done to lead as Secretary, and to do so with such a gracious, humble, and personable spirit. I will not attempt to fill her shoes; that would be, in my opinion, an impossible task. Instead, my hope is to do what I can to help lead the Association in this time of significant change.

So let me ask - what about you? Have you considered how you can get involved with our section? There is always a need for new ideas and energy within the section. Such a transition to a "younger" leadership is vital for the health and welfare of any organization! I am encouraged to see so many junior faculty, people much younger than me, getting involved in the section in big and small ways. I wholeheartedly encourage you to get involved - attend the spring meetings and the Section NExT gatherings, bring some of your students to our spring meetings, give a talk, chair a session of talks, inquire about serving as one of the officers (a complete list of the offices can be found at <http://sections.maa.org/allegheny/officers/officers1617.html>), nominate someone for one of our section awards.

As I look back at my own career, I have never regretted getting involved in section activities in the MAA; indeed, my life, professional and personal, has been truly enriched by my interactions with the people in the MAA. And isn't that what this is all about? The MAA is made up of people - people who want to see their students learn, and gain a passion for, mathematics; people who want to enjoy "doing" mathematics themselves.

I thank you for the impact you have had on me as a person. Keep it up! You may never know the extent to which you have impacted a fellow "friend" of mathematics!

"As I look back at my own career, I have never regretted getting involved in section activities in the MAA; indeed, my life, professional and personal, has been truly enriched by my interactions with the people in the MAA."

2017 Section Officer Election

At the Spring 2017 Section Meeting at Duquesne University, the members of the Section will elect the Second Vice-Chair, Newsletter Editor, Treasurer, and Coordinator of Student Programs. Descriptions of these offices appear on the next page.

Section Officer Nominating Committee



Tim Flowers, Chair
Indiana University of Pennsylvania



James Sellers
Penn State University



Pam Wovchko
West Virginia Wesleyan College

Candidate Biographies

Henry Escudro, Juniata – Candidate for 2nd Vice Chair/1st Vice Chair

Henry Escudro is an associate professor at Juniata College. He earned his PhD in Mathematics from Western Michigan University in 2006. He is an advisor of the Null Set (Juniata's math club) and of the Pi Mu Epsilon Alpha Gamma Chapter at Juniata. He was a member of the Allegheny Mountain Section's Service Award Committee in 2015 and Governor Nominating Committee in 2016. Aside from teaching, he is involved in the general education curriculum initiatives of Juniata and in setting up a Math Teachers Circle in Huntingdon.

Duane Farnsworth, Clarion – Candidate for Treasurer

Duane Farnsworth graduated from the University of Buffalo in 2007 having developed research interests in functional analysis and differential equations. After spending some time as a visiting professor at Marshall University, he joined the mathematics department at Clarion University in the fall of 2011. As a teacher at Clarion he works hard for his students while trying to impart to them some of his enthusiasm for mathematics. He has been an active conference participant in both the Ohio and Allegheny Mountain Sections of the MAA, and he has served as treasurer of the Allegheny Mountain Section since 2011. Now that he has finally learned how to do the job, he would like the opportunity to serve as treasure for one more term.

Kim Jones, Washington & Jefferson – Candidate for Newsletter Editor

Kim Jones is an Instructor at Washington and Jefferson College. She earned a B.A. in Anthropology and Mathematics from The Pennsylvania State University, and an M.S. in Mathematics from Virginia Commonwealth University. She joined the mathematics department at W&J in the fall of 2005. In addition to teaching, she has serves as W&J's math placement coordinator. One of her greatest joys is sharing her love and excitement for mathematics with her students.

Dan Shifflet, Clarion – Coordinator of Student Programs

Dan Shifflet is an Associate Professor at Clarion University of Pennsylvania. He has attended every spring meeting of the Allegheny Mountain Section since joining in 2011. He has been on several section award committees, coordinated student and faculty presentation sessions, helped run the book exhibit, and been active in Section NEXT. For the past year he has served as the interim Coordinator of Student Programs. Dan enjoys working with the Math Club at Clarion, telling corny jokes in class, and practicing inquiry-based learning in upper-level classes. He received his Ph.D. from Bowling Green State University in non-commutative algebra.

Allegheny Mountain Section Office Descriptions

All Section Officers

All section officers are expected to participate in three Executive Committee Meetings each year. The Spring meeting is held at the Spring Section Meeting, usually in April. The Summer meeting is usually held in June, and the Fall meeting is usually held in October. Section officers are also expected to attend the Business Meeting held at the Spring Section Meeting. Section officers often serve the Section in other ways, such as serving on committees or assisting with the events of the Spring Section Meeting. In addition, all section officers contribute to e-mail discussions about Section business throughout the year.

Second Vice-Chair/First Vice-Chair

The primary duty of the Second Vice-Chair is to organize the faculty contributed talks at the Spring Section Meeting. This includes collecting the faculty talk registrations (typically sent by e-mail), coordinating with the host institution, scheduling times and rooms, and finding moderators for talks. Much of this work is done in the weeks directly preceding the Section Meeting. After one year, the Second Vice-Chair becomes the First Vice-Chair for one year. The First Vice-Chair acts as the contact person for the three invited speakers for the Spring Section Meeting. Duties include inviting the speakers who have been determined by the executive committee (usually during the summer) and confirming travel, lodging, and registration with the invited speakers. The First Vice-Chair also finds people to meet the speakers when they arrive at the meeting and to introduce the speakers. This work occurs mostly in the summer and in the month before the section meeting. The term of the position is two years total.

Newsletter Editor

The primary responsibility of the Newsletter Editor is to publish a newsletter to be disseminated to all members of the Section at least twice each academic year - one in the Fall, typically late October, and one at least a month prior to the Spring Meeting. The term of the position is two years with possibility of re-election for subsequent terms.



Treasurer

The Treasurer keeps all the financial accounts and records of the Section. The Treasurer receives all money paid into the Section and deposits it in the Section's bank account. The Treasurer also pays all bills of the Section out of the Section's funds and files the Annual Financial Reports and other requested reports with the MAA Director of Finance. The Treasurer has additional responsibilities with regard to the Spring Section Meeting, including organizing the MAA book and merchandise sale, contacting book company representatives for donations, preparing meeting folders and name tags, and collecting registration information to be used for the Annual Section Report. Most of the work occurs right before and after Executive Committee Meetings with the largest amount being before and during the Spring Section Meeting. The term of the position is three years with possibility of re-election for subsequent terms.

Coordinator of Student Programs

The primary responsibility of the Coordinator of Student Programs is to organize student activities at the Spring Section Meeting. This includes scheduling student talks and organizing a student breakout session. The Coordinator collects the student talk registrations (submitted by email), coordinates with the host institution, schedules times and rooms, finds moderators for student talks and also prepares the abstracts of student talks. The breakout session has recently been a student problem-solving competition, but it has previously consisted of panels and talks on REUs, mathematics competitions, and careers in mathematics. Much of this work is done in the weeks directly preceding the Spring Section Meeting. The term of the position is two years with possibility of re-election for subsequent terms.

Spring Section Meeting: Duquesne University, April 7-8



Invited Addresses



Robert Devaney, Boston University
The Fractal Geometry of the Mandelbrot Set

In this lecture we describe several folk theorems concerning the Mandelbrot set. While this set is extremely complicated from a geometric point of view, we will show that, as long as you know how to add and how to count, you can understand this geometry completely. We will encounter many famous mathematical objects in the Mandelbrot set, like the Farey tree and the Fibonacci sequence. And we will find many soon-to-be-famous objects as well, like the "Devaney" sequence. There might even be a joke or two in the talk.

Dan Fox, Pittsburgh Pirates

The Math Says Yes: Analytics and Organizational Change in Major League Baseball

Major League Baseball is an institution with a long and storied tradition. In this talk we'll explore what happened in one organization when analytics met tradition. We will also talk about the implementation of analytics at all levels of the operation and provide some examples of how the math is being used to inform the decision making process.



Jennifer Quinn, University of Washington
Epic Math Battles: Counting vs. Matching

Which technique is mathematically superior? The audience will judge of this tongue-in-cheek combinatorial competition between the mathematical techniques of counting and matching. Be prepared to explore positive and alternating sums involving binomial coefficients, Fibonacci numbers, and other beautiful combinatorial quantities. How are the terms in each sum concretely interpreted? What is being counted? What is being matched? Which is superior? You decide.

2017 Spring Section Meeting

Schedule of Events

Friday, April 7, 2017

11:30 - 12:30	Section Officer's Meeting
12:30 - 1:30	Section NExT Lunch
1:30 - 3:30	Section NExT Workshop
2:00 - 4:00	Registration
2:00 - 3:45	Book Exhibits
3:55	Welcome from Duquesne University
4:00 - 5:00	Invited Address
5:00 - 5:45	Registration
5:15 - 6:30	Dinner and Awards
6:40 - 7:25	Student Problem Competition
6:40 - 7:25	MAA Tensor Grants Presentation: Florence Fasanelli, MAA
6:40 - 9:30	Book Exhibits
7:35 - 9:30	Student Talks
9:30 - 10:15	Pizza Party

Saturday, April 8, 2017

7:30 - 8:45	Breakfast
8:00 - 8:45	Business Meeting
8:00 - 9:00	Registration
9:00 - 10:00	Invited Address
10:00 - 11:45	Book Exhibits
10:15 - 11:30	Faculty Talks
10:15 - 11:30	Panel Discussion: Jobs in Business, Industry, and Government
11:45 - 12:45	Invited Address
12:45	Closing Remarks



Section NExT Workshop: "Exposition is the way (to write for the MAA)" by Jennifer Quinn

The MAA is the premier publisher of expository mathematics with three journals, two magazines, and an online history journal. This workshop will introduce participants to MAA's publications, their submission guidelines, and include a critical examination of exemplary manuscripts.



Jennifer Quinn,
University of
Washington

Jennifer Quinn is a professor of mathematics in the School of Interdisciplinary Arts & Sciences at the University of Washington Tacoma and interim director for the campus's Teaching & Learning Center. She earned her BA, MS, and PhD from Williams College, the University of Illinois at Chicago, and the University of Wisconsin, respectively. She has served as Executive Director for the Association for Women in Mathematics for two years, received one of MAA's 2007 Haimo Awards for Distinguished College or University Teaching, the MAA's 2006 Beckenbach Book award for Proofs That Really Count: The Art of Combinatorial Proof, co-authored with Arthur Benjamin, and had the honor to co-edit Math Horizons (also with Arthur Benjamin) from 2004-2008. Over the years she has served on the boards or steering committees of the Spectrum Book series, Mathematics Magazine, Math Horizons, Phi Beta Kappa Alpha Alumni Association of California, and Oregon Public Broadcasting's production Mathematics Illuminated.

For more information about this workshop or to be added to the Section NExT mailing list, please contact the Section NExT Program Coordinators, Erin Bancroft (EEBancroft@gcc.edu) and Kim Roth (roth@juniata.edu).

2017 Spring Section Meeting

Conference Registration

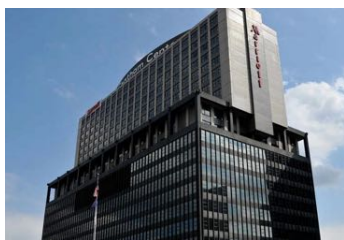
Registration for the conference is available electronically at the conference webpage:
http://sections.maa.org/allegheny/annual_meeting_2017/meeting2017.htm

The deadline for electronic registration and abstract submission is Friday, March 31st at 11:59pm. You may still register at the meeting after electronic registration has ended.

Note: If you are giving a talk, you must complete BOTH registration forms.

Hotel Information

When making your reservation, be sure to mention that you will be attending the MAA Annual Meeting at Duquesne University to receive the special conference rates shown.



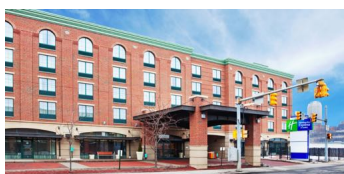
Marriott City Center

<http://www.marriott.com/hotels/travel/pitdt-pittsburgh-marriott-city-center/>
 112 Washington Place
 Pittsburgh, PA 15219
 (412) 471-4000
 Block price: \$159.00 + tax per night
 Parking: \$18-\$28 per day
 Shuttle service to Duquesne University: Yes
 Rate Deadline: March 17, 2017



Cambria Suites

<http://www.cambriasuitespittsburgh.com/>
 1320 Centre Avenue
 Pittsburgh, PA 15219
 (877) 305-7123
 Block price: \$121.00 + tax per night
 Parking: \$18 per day
 Rate Deadline: March 10, 2017



Holiday Inn Express (South Side)

<https://www.ihg.com/holidayinnexpress/hotels/us/en/pittsburgh/pitxs/hoteldetail>
 20 South Tenth Street
 Pittsburgh, PA 15203
 (412) 618-3020
 Block price: \$114.00 + tax per night
 Parking: \$18 per day

For More Information

Find detailed and up-to-date information on the meeting's website at
http://sections.maa.org/allegheny/annual_meeting_2017/meeting2017.html.

Newsletter Editor:

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