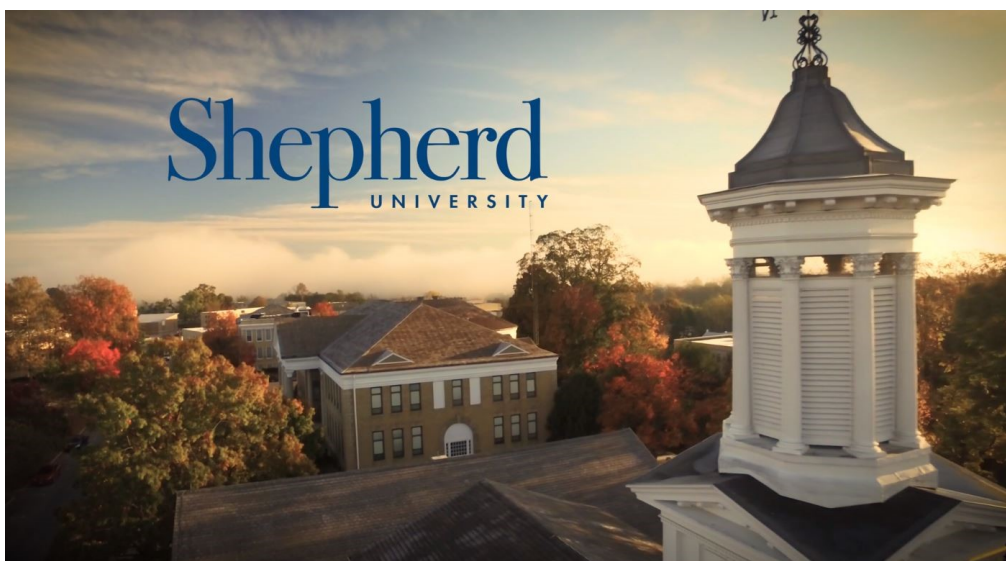


Fall 2018

Allegheny Mountain Section of the Mathematical
Association of America

Allegheny Mountain Section Newsletter



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SPRING SECTION MEETING AT SHEPHERD UNIVERSITY

The annual Spring Meeting of the Allegheny Mountain Section will be held April 5-6 at Shepherd University, Shepherdstown, West Virginia. Our three featured speakers will be **Michael Pearson**, Executive Director of the MAA, **Margret Robinson** from Mount Holyoke College, and **Gretchen Koch-Noble** with the US Government. Biographies of our speakers can be found on pages 7 and 8 in this newsletter. More detailed information on our Spring Meeting will be forthcoming in our spring newsletter.

Shepherdstown, which is located along the eastern edge of our region, is the oldest town in West Virginia and is centered in the Historic Civil War area. Antietam National Battlefield and Antietam National Cemetery are only a few miles away. Also in the region are Harpers Ferry National Historic Park, Ferry Hill Plantation, and numerous other historic sites. Other attractions include the Appalachian National Scenic Trail and the Appalachian Trail Conservancy headquarters.

So plan to come to the Spring Meeting and stay to take advantage of the abundance of history and scenic outdoors Shepherdstown has to offer. We hope to see everyone there! Also, don't forget to like us on Facebook (<https://www.facebook.com/alleghenymaa/>) and follow us on Twitter (<https://twitter.com/alleghenymaa>). See page 5 for more information on our new social media sites!

REPORT FROM OUR MAA SECTION CONGRESS REPRESENTATIVE: Pam Wovchko



**Pam Wovchko of West Virginia Wesleyan College,
MAA Congress Representative**

I am very excited to tell you about another great thing the MAA is doing for you. Brand new this year, the MAA is making the major talks from MathFest available to members! To access the recordings, go to <https://www.maa.org>. From there, click the login button and log in, which will take you to <https://www.maa.org/my-profile>. Then, scroll down to "Member Benefits"; at the bottom of Member Benefits is "The MAA Video Library". In the library, you'll see recordings of many of the large lecture sessions from Mathfest 2018.

At MathFest, Congress members were reminded of the MANY, MANY programs of the MAA. The MAA completed its business strategic plan and core values last year and will be working on a programmatic

strategic plan this year. I was overwhelmed by the number of programs, and I want to remind you of some of the programs and opportunities that are available to you. Detailed information about all of the MAA's programs can be found on their website.

1-SIGMAA's (Special Interest Groups of the MAA) Three new SIGMAA's are starting: Recreational Mathematics, Mathematics and Sports, and Mathematical Knowledge for Teaching. The cost of a SIGMAA membership is \$12/year. For a full list of SIGMAA's, go to <https://www.maa.org/community/sigmaas>

2-PICMath (Preparation for Industrial Careers in Mathematical Sciences) PICMath offers a summer training workshop for faculty and support for teaching a spring semester research course related to PICMath.

3-Committee/Council Membership Many of the MAA's committees are having online meetings; so attendance at the National Meetings is not necessary for membership in most committees. To volunteer for a committee, fill out the form found at <https://www.surveymonkey.com/r/CFJ56SG> The MAA is going to be examining the committee structures and potential changes. For now, a task force has been formed to determine the best process to go about this examination.

4-Student Travel Grants Many students attend Section meetings, but not as many attend national meetings. Please be aware that there are student travel grants available for the national meetings <https://>

www.maa.org/programs-and-communities/outreach-initiatives/student-travel-grants

While the MAA's transition away from the Joint Meetings surprised many of us, I can assure you that the MAA has your best interest in mind. They realize that most of our members have a strong connection to their section, and a task force has been formed to see how the MAA can better support sections. (For example, is there a way the MAA can help with section meeting registration?)

As part of the transition away from the MAA's involvement in the Joint Meetings, the Congress will not be meeting at the Joint Meetings in January. Congress members now participate in Congress Learning Communities (CLiCs). These CLiCs will meet electronically throughout the year. The themes for CLiCs are: Community of K-12 Students and Teachers, Community of Students Activities and Sections, Inclusivity, Communication (MAA Publications/Talks), Reading/Listening Activities at the JMM, Teaching and Learning (and Professional Development), Mission and Membership, Math Beyond the MAA.

Please read the MAA Focus for more news on the MAA. Jackie Jensen-Vallin does a great job of putting it together, and you'll learn something new in every issue. Enjoy what's left of your fall semester. Hope you can make it to the Joint Meetings in Baltimore!

FROM THE CHAIR: Tim Flowers

As the cool autumn air reminds us that the days are getting shorter and we watch leaves begin to change and fall, perhaps the spring is not foremost on your mind. But, the section's Executive Committee members (and the local organizing team at Shepherd, of course) are hard at work, preparing for the annual spring section meeting.

I have had the privilege to serve the Allegheny Mountain Section in many ways - as an officer, local organizer, and member of various committees. As chair, I have seen how much work is done behind the scenes throughout the year. Our Executive Committee is a microcosm of the section at large. We have wonderful people throughout the section and I have enjoyed getting to know them and work with them.

However, we need you too. Our section is our members and we have many ways to get you involved. Maybe you (or someone you know) are looking for a first step, to start learning about our section. Reach out and let me know. Maybe you've been around our section for a while and would like to get involved in a more significant way. Reach out and let me know. Maybe you are looking for rewarding work and establishing connections with faculty throughout the section. Reach out, we can use your help.

As mentioned above, our Spring

Meeting on April 5-6, 2019, will be held at Shepherd University. This summer I was able to visit the campus in Shepherdstown, WV, a town on the banks of the Potomac River. It is a beautiful and historic area. Mark your calendars now so that you can plan to attend. We have another engaging lineup of invited speakers (see pages 7, 8) and will continue to offer student-centered programs. We will again provide a free pizza dinner for all the students. We also have some changes coming in 2019, so please watch for that and other meeting details in our spring newsletter.

For now, please take a moment to review our call for nominations for our section awards (pg 6). I am sure many of us have deserving colleagues and our section would be honored to help to recognize them for their distinguished teaching, for their successes in mentoring undergraduate students, or for their service to the Allegheny Mountain Section. The nomination process is straightforward - send a letter or email to the chair of the committee, with a description of how the nominee meets the criterion for the award. We are now accepting nominations.

If you have any questions or suggestions regarding our section's activities or operations, I would be happy to hear from you at flowers@iup.edu. Enjoy the remaining weeks of fall, and I hope to see you at Shepherd in April.



Tim Flowers of Indiana
University of Pennsylvania,
Section Chair

"Our section is our members and we have many ways to get you involved."

SECTION NExT REPORT

Kim Roth, Juniata College and John Tolle, Penn State DuBois

For the Spring 2019 Section NExT meeting, we are trying something new: For many years our Section NExT workshop has taken place in the early afternoon on Friday, preceding the Allegheny Mountain Section Spring Meeting. But for this upcoming April, we have scheduled the Section NExT workshop for Saturday afternoon, April 6 (beginning with lunch at 1:00), following the close of the Spring Meeting, at Shepherd University in Shepherdstown, WV. Our topic and speaker are still to be determined. By scheduling the workshop on Saturday afternoon, we hope to accommodate junior faculty who do not wish to miss or cancel their Friday classes. We therefore encourage senior faculty to inform junior faculty in their department of the opportunity to attend the workshop in April, and remind them that attending will not disrupt their regular schedule.

The Fall 2018 Section NExT workshop was held on September 29 at California University of Penn-

sylvania. The morning session was a panel discussion on the myriad issues facing faculty at all levels, including dealing with difficult or unusual students situations, academic integrity violations, grade disputes, FERPA and Title IX considerations, mandated reporting, and many other issues all faculty will face sooner or later. The panelists were Jessica Deshler of WVU, Richard Brazier of PSU, and John Zimmerman of W&J.

In the afternoon session, Jessica Deshler introduced participants to the recently published MAA Instructional Practices Guide (to which Dr. Deshler was a contributor), giving an overview of its content and demonstrating several implementations of the various active learning approaches discussed in its pages.

If you are interested in attending a future meeting, email Kim Roth (roth@juniata.edu) or John Tolle (jut14@psu.edu).

CALL FOR NOMINATIONS

The Executive Committee is looking for MAA Allegheny Mountain Section members to fill the following three positions; Second Vice-Chair, Newsletter Editor and Coordinator of Student Programs.

All section officers 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 typically held in May or June, and the fall meeting is usually held in October. Section officers are also expected to attend the Business Meeting which is conducted the Saturday morning of the Spring Section Meeting. Section officers often serve in other ways as well, 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.

Please consider nominating one of your Allegheny Mountain Section friends or colleagues for one of these service positions. Self-nominations are welcomed. All nominations should be sent by January 23, 2019 to:

Pam Richardson, Westminster College
richarpa@westminster.edu

EXECUTIVE COMMITTEE POSITION DESCRIPTIONS

Second 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 usually distributed 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.

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 problem-solving competition. The Coordinator collects the student talk registrations (submitted by email), coordinates with the host institution, schedules times and rooms, finds moderators for and prepares the abstracts of the student talks. 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.

NEW ALLEGHENY MOUNTAIN SECTION SOCIAL MEDIA ACCOUNTS

The Allegheny Mountain Section has a new presence on social media! Please follow our Twitter account (@alleghenymaa or at <https://twitter.com/alleghenymaa>) and our Facebook page (@alleghenymaa or at <https://www.facebook.com/alleghenymaa/>). Additionally, we would like everyone to use the hashtag #AlleghenyMAA for discussion about our section.

Content for reposting to our social media accounts is always welcome -- please send any ideas to our Director of E-Communications, Tom Cuchta (tcuchta@fairmontstate.edu or <http://tomcuchta.com>).



SEEKING NOMINATIONS FOR AWARD RECIPIENTS

2019 Allegheny Mountain Section Distinguished Teaching Award

The criterion for the Annual Allegheny Mountain Section Distinguished Teaching Award is a record of extraordinary success in teaching, a record of teaching effectiveness that can be documented, and an ability to foster curiosity and generate excitement about mathematics. It is preferable to have an award recipient whose teaching influence extends beyond their own institution. The nominee should be a member of the MAA, must teach at an institution within the section, and should have at least five years of teaching experience in a mathematical science.

Teaching is to be interpreted in its broadest sense, not necessarily limited to classroom teaching (it may include activities such as preparing students for mathematical competitions at the college level, for example, the Putnam Prize Competition or the Mathematical Contest in Modeling, or attracting students to become majors in a mathematical science or to become Ph.D. candidates).

Please send your nomination, with a description of how the nominee meets the criterion, by March 4, 2019 to:

Courtney Nagle, Penn State Behrend
crt12@psu.edu

2019 Allegheny Mountain Section Service Award

The criterion for the Annual Allegheny Mountain Section Service Award is a consistent record of excellence in service to the section over a period of time. In this context "service" is interpreted in a broad sense to include holding office, coordinating contests, organizing sessions, acting as a panelist, speaking at sessions, acting as the coordinating host for a meeting, or participating in any other activity that contributes to the well-being of the Section. Please send your nomination, with a description of how the nominee meets the criterion, by March 4, 2019 to:

Henry Escudro, Juniata College
escudro@juniata.edu

2019 Allegheny Mountain Section Mentor Award

The Mentor Award has been a part of the Allegheny Mountain Section since the year 2000. A nominee should have made significant contributions to the development of undergraduate students in mathematics as scholars. This includes, but is not limited to, encouraging student participation in MAA activities and advising students who make presentations at the Section meetings. Please send your nomination with a description of how the nominee meets the criteria, by March 4, 2019 to :

Carolyn Cuff, Westminster College
ccuff@westminster.edu

MEET OUR INVITED SPEAKERS: SPRING 2019



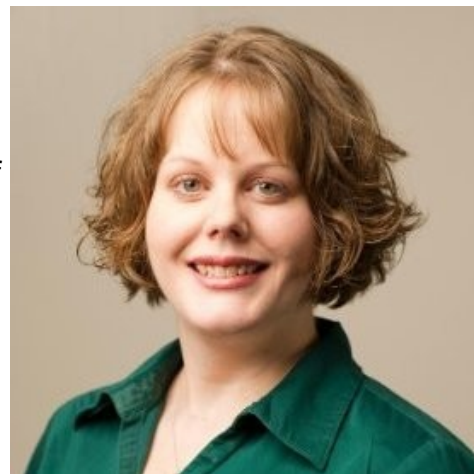
Michael Pearson received a bachelor's degree from the University of Mississippi in 1980, a master's degree from Mississippi State University in 1982 and a Ph.D. (Harmonic Analysis) from The University of Texas at Austin in 1989. Prior to joining the MAA (in 2002), he served on the faculty at Florida International University (1989-1992) and Mississippi State University (1992-2002).

As Executive Director of the MAA, Michael provides leadership to advance the MAA's mission to further the understanding of mathematics and its impact on our world. As a long-time member of the MAA, he is delighted to have the opportunity to work closely with colleagues who share the sense of community and common purpose that he sees as the fundamental strength of the Association.

Margaret Robinson is the Julia and Sarah Ann Adams Professor of Mathematics at Mount Holyoke College. She received her B.A from Bowdoin College and her Ph.D from Johns Hopkins University. Her research interests are in number theory, especially p -adic analysis and local zeta functions. Most recently she has been working with Joshua Holden and Pamela Richardson on understanding the behavior of certain exponential functions that are used in digital signature schemes. Margaret participated regularly in Mount Holyoke's NSF sponsored REU from 1992-2013. Her Department jointly co-authored the book *Laboratories in Mathematical Experimentation* using materials from the course that had by that time become central to the Mount Holyoke Mathematics major. For three summers, she taught in the Summer Mathematics Program (SMP) at Carleton College. Her experiences working with REU students, teaching the laboratory and SMP classes, have been central to her growth as a math teacher. In 2013, Margaret received the Haimo Award for Distinguished Teaching of Mathematics from the MAA. She served as chair of her department for two terms and as interim chair of the computer science department for one year. She is married with two daughters and loves to hike in the hill country of Western Massachusetts.



Gretchen Koch-Noble received her bachelor's of science in mathematics with a minor in chemistry from St. Lawrence University in 2001. She went on to receive a master's of science in applied mathematics in 2002 and a PhD in mathematics in 2005 from Rensselaer Polytechnic Institute. She was an assistant professor of mathematics at Goucher College from 2005 to 2012. While at Goucher, she taught a variety of courses, ranging from precalculus to independent studies in creating a mathematical model of human digestion. Her research was in biomathematics, and she developed a pharmacokinetics model and Excel module as part of the BioQUEST Curriculum Consortium.



Since 2012, Gretchen has been working as an operations research analyst for the Federal Government. In her daily work, she does everything from developing analysis techniques to writing software requirements to project management. Much of her work has been in developing software tools to create optimal schedules constrained by the size of the workforce and work rules.

Gretchen lives in southern Maryland with her husband, Pete, and two children, Matthew and AnnMarie.

Congratulations to our 2018 Allegheny Mountain Section award recipients!

Distinguished Teaching Award:

Courtney Nagle of Penn State Behrend

Mentor Award:

Carolyn Cuff of Westminster College

Service Award:

Shelly Bouchat of Indiana University of Pennsylvania

UPCOMING MEETINGS

- **Joint Mathematics Meetings 2019**
January 16 - 19, Baltimore, MD
- **Allegheny Mountain Section Spring Meeting 2019**
April 5 - 6, Shepherd University, Shepherdstown, WV
 - **MAA MathFest 2019**
July 31 - August 3, Cincinnati, OH
- **Allegheny Mountain Section Spring Meeting 2020**
April 3 - 4, Grove City College, Grove City, PA

2018 PHOTO GALLERY



Spring Section Meeting



Excitement builds during registration.



W&J students enjoying the spring meeting!



Ken Ono talking with students after buffet dinner.



Courtney Nagle winner of the Distinguished Teaching Award.



Carolyn Cuff winner of the Mentor Award.

FOUND MATH

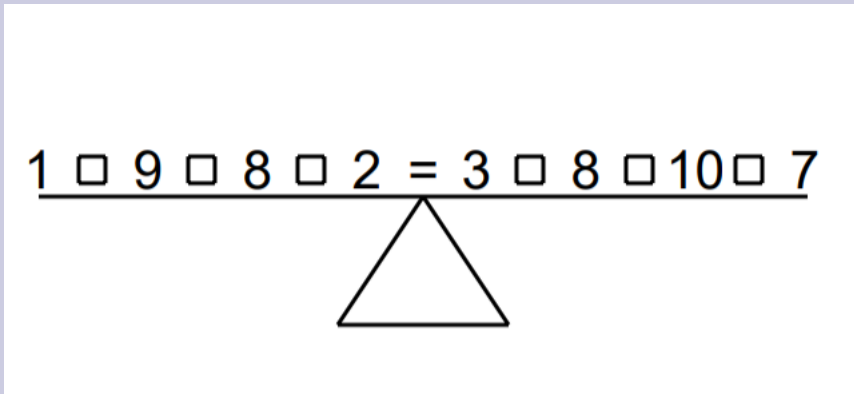


MAA Found Math Photo:
The Rotunda of Pittsburgh's Union
Station by Laura McHugh.

Found Math is a photo gallery of
mathematical images on the MAA
website.

[https://www.maa.org/community/
columns/maa-found-math](https://www.maa.org/community/columns/maa-found-math)

FALL PUZZLE The Balances



Put a plus (+) or minus (-) sign
inside each block so that each
side has the same value.

Puzzle from <http://innoludic.com>

Do you have any exciting news you would like to share?
If so, please send it to me! We would love to hear what
you and/or your students are doing within our section.

Newsletter Editor

Kim Jones

Washington & Jefferson College

kjones@washjeff.edu