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# THE EPADEL SECTION NEWSLETTER

Spring 2019 Issue

<http://sections.maa.org/>

## SPRING MEETING DEDICATED TO DAVID ZITARELLI

The Spring 2019 EPaDel meeting will be dedicated to David Zitarelli, a committed member of the MAA for almost 60 years. David is responsible for recording the official history of EPaDel from 1926-2000, and anyone

interested in obtaining a free hardcopy of this history will be able to request one at the Spring meeting at King's College. Please see below for Edward Aboufadel's writeup honoring David, taken from the MAA's [In Memoriam](#) site.



*In Memoriam:* David E. Zitarelli passed away on December 2, 2018, at the age of 77. He was professor emeritus at Temple University and a member of the MAA for 57 years. Zitarelli was an authority in the history of mathematics, and the MAA will be publishing his [A History of Mathematics in the United States and Canada: Volume I: 1492-1930](#) in 2019. Zitarelli also wrote a [history of the MAA's EPADEL section](#) and served on the MAA's Centennial History subcommittee and the Joint Committee on Archives. More information about his life and career can be found in an [autobiographical sketch](#) he posted to his Temple site, an article in Philadelphia Inquirer, and [his obituary](#).



*The Fall 2018 Meeting at West Chester University*

SPRING 2019  
EPADEL  
MEETING

MARCH 23



KING'S  
COLLEGE  
TRANSFORMATION. COMMUNITY. HOLY CROSS.

SEE THE OFFICIAL  
[EPADEL WEBSITE](#)  
FOR ALL DETAILS

DISCOUNT FOR  
PRE-REGISTERING  
ENDS MARCH 9



**PennState**  
Harrisburg



Greetings!

Since the Joint Meetings in January will cease being “Joint” in the near future many of the January meeting activities are being migrated to MathFest in the summer. One such activity is the meeting of the MAA Congress (formerly the Board of Governors). As a result the Congress did not meet last month so I have nothing new to report from the national organization in this newsletter.

But I won’t let that stop me as there is a great deal of “old” news that bears repeating.

The MAA is a large, diverse community of mathematicians. If you aren’t involved in its activities, either nationally or here at the EPaDel Section, you are depriving yourself of everything the MAA has to offer.

“And what does it offer?” I hear you ask. Well, let me show you.

### **SIGMAAs:**

The Special Interest Groups of the MAA exist so that mathematicians with similar interests can find each other, share ideas, and work together. SIGMAAs exist on a wide range of topics. If you aren’t in one of the SIGMAAs consider joining one. Currently 17 SIGMAAs exist. One of the newest is the RecSIGMAA (SIGMAA for recreational mathematics). You can find a complete listing click here: [www.maa.org/community/sigmaas](http://www.maa.org/community/sigmaas).

### **Video Library for Members:**

This is a fairly new offering. The major talks at MathFest are being recorded and are available to members at the following link: [www.maa.org/video-library](http://www.maa.org/video-library). (You must be a member to view these so please login first.)

### **Committee memberships:**

Yes, I know. How is this something to get excited about? But think about it. If there is an MAA committee, either nationally or locally, working on something that you are interested in, then that is a roomful of people with whom you automatically have a common interest. Even better, since the MAA is an all-volunteer organization the people on our committees are there because they **want** to be there. Serving on committees is a great way to meet people with a common interest who are outside your immediate sphere. If you’d like to get involved locally just introduce yourself to one of the Section officers and let us know you’re available.

If you are interested in serving nationally there is a list of national councils and committees here: [www.maa.org/about-maa/governance/council-and-committees-list](http://www.maa.org/about-maa/governance/council-and-committees-list) (click on one of the council names and go to the bottom of the page that opens to see the committees). To nominate yourself or another for a committee click here: [www.surveymonkey.com/r/MAAcommitteesuggestions](http://www.surveymonkey.com/r/MAAcommitteesuggestions)

Finally, the MAA is you. And me. Actually, it is us, all of us. The Association has much to offer and it is always looking for more, better, ways to serve you. But you can help by letting the current leadership know what the MAA can do for you. If you have ideas or suggestions one of my functions as Representative is to pass your ideas along. Let me know what you would like the MAA to be doing. I will either pass that along to the Congress next August at MathFest, or pass it along to whomever succeeds me as Representative.

Either way, I look forward to seeing you at the next Section Meeting at King’s College on March 23.

Bud Boman, Penn State Harrisburg  
EPaDel Representative to  
the MAA Congress

## Millersville University



Greetings!

I hope this report finds you well, I sincerely enjoyed seeing so many of you at the Joint Mathematics Meetings in Baltimore, and I hope to see many of you on March 23 at our spring EPaDel meeting at King's College in Wilkes-Barre.

Our thanks and congratulations to the members of the EPaDel section who are celebrating 25 and 50 years of MAA membership. They will be recognized during our business meeting on March 23.

Mark your calendars for the Fall 2019 EPaDel meeting that will be held at DeSales University on November 9, and

the Careers in Math Conference at Kutztown University on October 5.

We have exciting news regarding the spring 2020 section meeting; PASSHE-MA is joining us for the spring meeting in March at Millersville University. PASSHE-MA Association stands for the State System of Higher Education mathematics departments of the 14 state system universities in PA. The Association holds a conference each year at one of the 14 member institutions.

Start thinking about MathFest in Cincinnati, July 31-August 3, 2019, registration is now open and the abstracts' submission deadlines are, April 30 for Contributed Paper Sessions, and June 7 for Student Paper Sessions. Let's have our section well represented at MathFest 2019!

Finally, please do not forget to vote for our EPaDel Section Representative by March 12. The elected representative will play an important role in representing the interests of our section to the MAA Congress.

Ximena Catepillán, Millersville University  
Chair EPaDel

## HONORING 25 AND 50 YEARS OF SERVICE

Eugene C. Boman  
Robert M. Gethner  
Jeffrey A. Graham

Robert S. Manning  
Kenneth G. Monks  
Paul C. Pasles

Michael L. Levitan  
Richard E. Mitchell

Chris Rorres  
Doris Schattschneider

### EPaDel Leaders

From Left to Right:

Ellen Panofsky (Vice-Chair)

Bud Boman (Representative  
to the MAA Congress)

Ximena Catepillán (Chair)

Doug Ensley (Secretary)

Linda McGuire (Treasurer)



Photo Credit: Dr. Lin Tan, West Chester University





## SECTION NEXT ACTIVITIES

Section NExT is a professional development program for early career (and soon-to-be) mathematics professors. Members participate in activities at EPaDel section meetings, and participate in e-mail discussions about topics of interest. It's also a great way to meet colleagues from across the region. For more information, and to join (it's free!), please visit [sections.maa.org/epadel/sectionnext/](https://sections.maa.org/epadel/sectionnext/).

Please hold the date of Saturday, October 5, 2019. We will be having NExT activities in parallel with the EPaDel Careers in Mathematics Conference at Kutztown University.

If you have questions, find Brian Kronenthal (picture below) at our next meeting. Brian is one of EPaDel's Section NExT coordinators.



## VOLUNTEER AT AWM EVENTS

AWM volunteered at the DaVinci Science Center's Career Connection Days in late February and early March. Aided by students and faculty from Lebanon Valley, Lehigh, Penn State Brandywine, Cedar Crest, and DeSales, volunteers ran activities of mathematical discovery so as to help the WISE (Women in Science & Engineering) professional group showcase STEM careers to middle school-age children.

AWM has been asked to help put the "M" back into STEM at upcoming Girl Scouts Girls Go STEM Expos this Spring. (You do not need to be a member of AWM or Girl Scouts to participate.) Contact Eva Goedhart, [goedhart@lvc.edu](mailto:goedhart@lvc.edu), for details.



## WANT TO HOST AN EPADEL MEETING?

EPaDel is always looking for institutions who are willing to host one of our fall or spring meetings. If you believe your institution would be willing to host or if you would like more information on doing so, then please contact our chair at [Ximena.Catepillan@millersville.edu](mailto:Ximena.Catepillan@millersville.edu). The next available timeslot would be the Spring 2021 meeting.

## THE 2019 STUDENT MATH PAPER CONTEST

If you are an undergraduate writing a mathematics paper this year, consider submitting it for a prize in our yearly Student Mathematical Papers Prize Competition. The deadline is June 15.

Last year's winner, Brian Stottler from Elizabethtown College, wrote on "Improvements to Correlation Attacks Against Stream Ciphers with Nonlinear Combiners."

The 2019 winning author(s) will be recognized at the EPaDel Section's Fall 2019 Meeting and will receive a prize of \$200. Details on how to submit your paper or on previous winners can be found at this link: [sections.maa.org/epadel/awards/studentpaper/](https://sections.maa.org/epadel/awards/studentpaper/).

## PHILADELPHIA UNDERGRADUATE MATHEMATICS CONFERENCE



Temple University will host the Philadelphia Undergraduate Mathematics Conference (PUMC) on March 30, 2019. This is the fourth edition of the conference, with co-organizers Temple University, Bryn Mawr College, and La Salle University alternating as host. Sessions include 15-minute undergraduate talks, an undergraduate poster session, a professional development panel, and three plenary lectures by dynamic and successful early-career mathematicians. Registration for this free conference will close on March 15. For further details and to register, please visit [math.temple.edu/events/conferences/pumc/](http://math.temple.edu/events/conferences/pumc/).

## THE ANNUAL L2 GEOMETRY AND TOPOLOGY SEMINAR



The 14th annual L2 Geometry and Topology mini conference will be held at Lafayette College on Saturday, March 30, featuring four research-level talks in geometry and topology.

More information is available on the webpage: [sites.lafayette.edu/corvinoj/2019-l2gtseminar/](http://sites.lafayette.edu/corvinoj/2019-l2gtseminar/).

For any questions or to register, please contact either Ethan Berkove ([berkovee@lafayette.edu](mailto:berkovee@lafayette.edu)) or Justin Corvino ([corvino@lafayette.edu](mailto:corvino@lafayette.edu)). All are welcome and encouraged to come!



## HELP BUILD THE WORLD'S LARGEST SIERPINSKI TRIANGLE OUT OF K'NEX

On Saturday April 27th, 2019 from 10am – 2pm, come to the Bryn Mawr College sports field (next to Schwartz Gym — rain site) to help us build the World's Largest Sierpinski Triangle out of K'NEX pieces. This fractal triangle will be: 180 feet long x 90 feet wide, use 90,000 K'NEX pieces and be built up from over 18,000 small triangles. It will be three times as large as the previous record (pictured above).

All are welcome but please register as space is limited. (<https://bit.ly/2GDk6ht>)

See pictures and videos of the previous build (<https://bit.ly/2EUzdTH>) including a recent article in FOCUS (<https://bit.ly/2GNcYz6>) about the event.

## AMS PRESIDENT INVITED TO GIVE A LECTURE



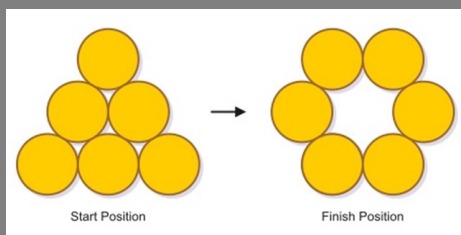
On March 20th, Jill Pipher, Professor of Mathematics at Brown University and President of the American Mathematical Society, will be delivering a lecture at Temple University as part of the College of Science and Technology's Dean's Distinguished Lecture Series. More information can be found [here](#).

## STUDENT ACTIVITY AT THE SPRING 2019 EPaDel MEETING



Can you divide a square into five congruent parts?

What is the smallest number of slides in which you can get from the left image to the right? (Only one circle is allowed to slide per move.)



Come tackle these puzzles as well as more of Martin Gardner's most famous math puzzles!! Work your way around the room during the EPaDel Spring 2019 Student Activity and see how many you can solve! No registration is necessary. Just show up on the day of the meeting!

## STEM DAY FOR HIGH SCHOOLERS



MORAVIAN COLLEGE

On Saturday, April 6, the Mathematics Society at Moravian College will host a STEM day for high school students interested in math and science. There will be activities hosted by a variety of STEM clubs on campus and a panel of faculty and students to discuss college as well as STEM careers.



YOU'RE INVITED TO MORAVIAN  
COLLEGE'S ANNUAL



## STEM DAY!

A unique experience for HS  
students interested in  
Math/Science.

April 6, 2019 8:45 - 1:30

Don't miss it!

Contact Charlie Peeke at  
stedp03@moravian.edu to  
RSVP or for more  
information.

This event is free for  
students grades (8-12)  
Participants will have a  
chance to win prizes,  
learn about various STEM  
careers, and experience  
a day on a college  
campus.

Moravian College encourages persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about physical access provided please contact Dr. Talbott at 610-861-1573 1 week prior to the event.

## DID YOU KNOW?

**From the founding of** the section in 1926 until 1962 all annual meetings were held on the Saturday after Thanksgiving. The resulting shift to the Saturday before Thanksgiving in 1963 caused a dramatic increase in attendance. Lesson Learned! As of 1989, the strictness of the date lessened.





## A SUCCESSFUL INAUGURAL CONFERENCE AT CEDAR CREST COLLEGE

In the fall of 2018, Cedar Crest College held the first annual Series on Exploring Combinatorics and Number Theory (SECANT) conference. Ron Gould and Michael Mossinghoff were the main speakers and 50 participants registered for the conference. (The banner picture above is from the conference.) Participants gave a total of 20 talks and the conference included a general open problem session as well as another session concentrating on open problems for undergraduate research. The day was a great success! Please look to <https://tinyurl.com/SECANT-Conference> for updated information on SECANT II coming this fall. Hope to see you there!

## CHECK IT OUT!

### [weusemath.org](http://weusemath.org)

This website is hosted by Brigham Young University, the home institution of the current MAA president, Michael Dorff.

The site lists careers that use math, interviews math majors who went on to work in those fields, and in general is dedicated to answering the question, "When will I ever use this?"

## LA SALLE STUDENTS: WORKING HARD & HAVING FUN

Dr. Stephen Andrilli, Dr. Janet Fierson, and undergraduate students Yitbarek Demesie, Daniel Gomez, Anthony Ibe, and Shania Kiat attended the Joint Mathematics Meetings in Baltimore in January 2019. Yitbarek participated in the undergraduate poster session, and he and Dr. Fierson presented a talk entitled "Reconfiguration Graphs Under Constraints and Variations" on their joint summer 2018 research.

Additionally, undergrads Shania Kiat and Katherine Weiss attended the 21st Annual Nebraska Conference for Undergraduate Women in Mathematics at the University of Nebraska-Lincoln in January 2019.

In the fall 2018 semester, La Salle's math club hosted a casino night in October and a trip to an escape room in November. Students also participated in the Putnam Competition in December, as well as in practice sessions leading up to the event.



## MORAVIAN MATHEMATICS SOCIETY: ESCHER & EPSILON

Our Mathematics Society continues to be busy this year like always!

In January, the Moravian College Mathematics Society ventured to Brooklyn for the Escher Exhibit & Experience at Industry City (was open until March 3, 2019) to learn more about the life and work of M.C. Escher. One student commented, "My favorite part of the trip was experiencing the exhibit itself. I've seen some of Escher work in pictures, but being able to see his artwork in person and the great detail in each of them was amazing!" Another commented, "It was really cool to learn about the methods he used to create each of his famous artworks."

The society also hosts frequent Epsilon talks (short 15-20 minute talks) on a variety of mathematical topics, which are often presented by the students. Some of the topics from this year include: The Extremes of Philosophy, The Mathematics of 20th Century Music, and Clever Problem Solving: Geometry Edition!





Wilkes University professor, Dr. John Koch, gave a presentation entitled "The Four Color Theorem" at King's College Mathematics Department Colloquium on October 4th, 2018. The Four Color Theorem states that, given any separation of a plane into contiguous regions, producing a figure called a map, no more than four colors are required to color the regions of the map so that no two adjacent regions have the same color. The proof of the Four Color Theorem is the first mathematical proof that is based, in part, on work calculated by computer. The lecture covered the 100 year history of the theorem, the structure of the proof, and the application of computers to the solution.



## Departmental Announcements



Dr. Stephen Andrilli attended MAA MathFest in Denver in August 2018 and gave a talk there entitled "The Vanishing Square Puzzle and the Fibonacci Sequence." He has also continued to serve as a referee for Mathematics Magazine and for The Pentagon.



We were glad to bring Dr. Gregory Longo to our community to head up our new program in Data Science. He will be joined by a new Computer Scientist for which we are currently conducting a national search.



Bryn Mawr just welcomed a new Assistant Professor of Mathematics, Dr. John Bergdall, whose research interests lie in number theory.



DeSales University congratulates Daniel Wisniewski, O.S.F.S., Ph.D., Associate Professor of Mathematics, for becoming the institution's new provost. His term began fall 2018. Good luck, Dan!



Farzana Chaudhry and Ellen Panofsky were both promoted to Associate Professor of Instruction in Mathematics. Our department is also fortunate to have hired two new tenure-track faculty members, Mihaela Ignatova, an analyst, and Atilla Yilmaz, a probabilist. In addition, we welcomed five new non-tenure-track faculty members: Max Avener, Zachary Bailey, Dan Rusu, Francisco Villarroja, and Kai Zhao.





# Thank You to King's College!

EPaDel would like to thank the administration at King's College for supporting EPaDel's endeavors and for hosting the Spring 2019 Meeting. We would also like to thank the members of the Mathematics Department at King's College (see right) for their contributions to the running of this conference.

Dr. Weiwei Zhang (Chair)  
Ms. Lea Anstett  
Dr. Tom Concannon  
Dr. Joseph Evan  
Dr. Daniel Ghezzi  
Dr. Todd Gutekunst  
\*\*Dr. Janine Janoski  
Dr. Karen McCreedy  
\*\*Dr. Ryo Ohashi  
Ms. Amy Swiatek  
\*\*Members of EPaDel's Exec Board

## A SPECIAL THANK YOU TO THE LOCAL COORDINATOR

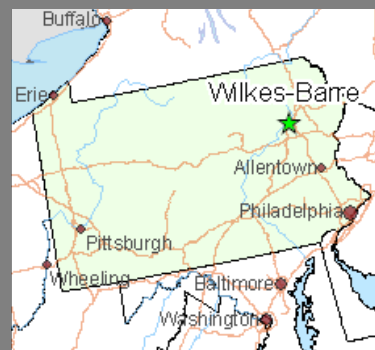


A special thank you is extended to Dr. Janine Janoski, the local coordinator for this event and EPaDel's main contact at King's for the meeting. We appreciate your time and volunteer work, Janine! We also deeply value your commitment to EPaDel, to the MAA, and to the math community at large.

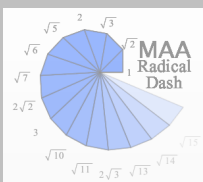
## GET TO KNOW KING'S COLLEGE

Here's 10 Fun Facts about King's College and the surrounding community.

- Founded in 1946 by the Congregation of Holy Cross from the University of Notre Dame.
- King's is a private liberal arts college with about 2300 students.
- Wilkes-Barre is a subset of the Scranton/Wilkes-Barre twin city community.
- A half-million people make this the fourth largest metro community in Pennsylvania.
- WB is an abbreviation for Wilkes-Barre, not just a film studio!
- WB is within a 3-hour drive from both Philadelphia and NYC.
- Cherry blossoms paint the community pink in April.
- Freshly picked veggies are sold at a weekly flea market near Allied Health Building.
- Home of Scranton/Wilkes-Barre RailRiders and Wilkes-Barre/Scranton Penguins.
- The airport code of Scranton/Wilkes-Barre is "AVP" – No one can recognize!
- Too many to list – come to "WB" and attend the EPaDel meeting to discover more!



Map courtesy of  
<https://www.bestplaces.net>



The Radical Dash is an event run each year at the JMM. It is a multi-day scavenger hunt for teams of undergraduates filled with math challenges and creative activities. Two EPaDel members (Janine Janoski from King's College and Stacey Muir from

Scranton University) have helped to run it from its inception. Thank you for making EPaDel proud, Janine and Stacey! This year, Whitney George from University of Wisconsin La Crosse and Kathleen Ryan from DeSales University were also enlisted

to help. See the cartoons below for an example of the type of creativity that Radical Dashers need to employ when posting submissions. Please remind all students attending future JMMs to be on the lookout for how to join in on the fun!



When the Proof is Left to the Reader vs.  
When the Proof is in the Text



Mathematical Hair Styles

This year, students partaking in the Radical Dash scavenger hunt at the JMM in Baltimore were asked to submit their own "bad math drawing." This request was inspired by Ben Orlin's talk on *Math with Bad Drawings*. To the left are two of the most creative submissions. Enjoy! If you'd like to see more, then use Instagram to filter on the tags #JMMdash19.