hio Focus

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Sinclair Community College Hosts Ohio MAA



The tower at Sinclair Community College stands out among the surrounding academic buildings.

The 101st Annual Meeting of the Ohio Section of the MAA will take place March 31 and April 1, 2017 on the Dayton Campus of Sinclair Community College. Events start at noon with the Leo Schneider Student Team Competition and committee meetings. **Marepalli "MB" Rao** (University of Cincinnati) will present his first talk at 1:45 with another on Saturday. J. Michael Pearson, Executive Director of MAA, will share some of his observations on mathematical competitions. The final invited speaker is Lauren "Lola" Thompson (Oberlin College), providing the after-dinner talk and the concluding presentation of the conference. There will also be contributed paper sessions on both days for meeting participants. Graduate and undergraduate students in mathematics, mathematics education, or related fields are encouraged to attend.

The MAA Ohio Section Newsletter

New Faculty Members Encouraged to be a Part of Project NExT

Ohio NExT (New Experiences in Teaching) is a program for new faculty members. Its goal is to help newer faculty to network with colleagues, to share ideas and experiences that promote professional growth, and to encourage faculty to become involved in the Ohio Section.

On Thursday evening, March 30th, the night preceding the Ohio Section Spring Meeting, members of Ohio NExT will gather for a banquet beginning at 7:00 p.m. at Fricker's (6834 Miller Ln, Dayton, OH 45414). This is a great opportunity to meet old friends and make new ones. After the banquet, the NExTers will spend an hour or so discussing a topic related to the profession.

Then, on Friday morning, March 31st, the Ohio NExT program will continue in room 346A of Building 1 on the Sinclair Community College campus. The program will feature two workshops, as well as contributed talks by Ohio NExTers. We are pleased to announce that Marepalli Rao of the University of Cincinnati will lead a workshop entitled "The Joy of Data – Some inspirational data analyses from scientific literature." Michael Pearson, Executive Director of the MAA, will lead an Inquirybased Learning workshop on the recent CUPM Curriculum Guidelines document. Dr. Pearson is looking to create an interactive session by working with participants attending the workshop in an IBL format. Contact Katie Cerrone by March 10th if you would like to participate in this IBL workshop.

Ohio NExT is open to anyone in the Ohio Section who is in his/her first five years of teaching in Ohio. If this applies to you, please consider joining us this spring for our NExT Banquet and Workshop, as well as the Ohio Section Meeting that follows. Contact Katie Cerrone (kc24@uakron.edu) for membership information and details.

Ohio NExT is coordinated by Katie Cerrone from University of Akron (kc24@uakron.edu), Chandra Dinavahi at the University of Findlay (dinavahi@findlay.edu), and Michael Schroeder at Marshall University (schroederm@marshall.edu).

Final Governor's Report Describes National Bylaws Changes

As I write this report, I am serving as the Governor of the Ohio Section of the MAA. But by the time this report is published, my role will have changed. At the joint meetings in Atlanta, at the MAA business meeting, the MAA membership voted to approve revised bylaws and articles of incorporation. The new bylaws are effective beginning February 1, 2017. At the Board of Governors meeting the board approved a transition plan which outlines the make-up of the new nine member Board of Directors.



Beginning February 1, 2017, the MAA Board of Directors will be as follows: President Deana Haunsperger is the President;

Past-President Francis Su is the Past-President;

First Vice President Matt Boelkins becomes the Chair of the Congress;

Second Vice President Tim Chartier is the Vice President;

Treasurer Jim Daniel is the Treasurer;

Associate Treasurer Hortensia Soto becomes the Officer-at-Large;

Secretary Barbara Faires is the Secretary;

Associate Secretary Gerard Venema is the Associate Secretary;

Chair of the Committee on Sections Betty Mayfield is the Chair of the Committee on Sections;

All members of the current Board of Governors (BOG) not mentioned above will continue in their current capacity as members of the Congress until their current terms expire. The plan for the national election in the spring of 2017 is to elect one vice president and a president elect.

This means beginning February 1, I will no longer serve as Governor of the Ohio Section but will serve as the Ohio Section Representative to the MAA Congress. In some sense, what was once the Executive Committee of the BOG becomes, under our new bylaws, the Board of Directors of the MAA and what was the Board of Governors becomes the Congress. Bylaws for each of the 29 sections will need to be revised to reflect the changes in the national bylaws. It is planned that these revisions will be done on the regular schedule so the Ohio Section bylaws will need to be revised in 2024 - 25 and submitted to the Committee on Sections. Congress will decide this summer on how to proceed during the transition.

The new Congress will be a conduit for communication within the Association with its principal responsibilities including: approving strategic goals and priorities; advising the Board of Directors on changes to the Association bylaws; electing at-large members of the Congress; and recommending to the Board programmatic and social policies for the Association. The incoming Chair of the Congress, Matt Boelkins, has convened a group of interested volunteers from the current BOG to establish plans to initiate action as a Congress and create an agenda for the first meeting of the Congress at MathFest in Chicago.

The vote on the revised MAA bylaws was not a sure thing. Several people expressed concerns, notably former MAA executive director Tina Straley and former MAA secretary Martha Siegel. These concerns led to changing the proposed bylaws to give the power to approve future amendments to the bylaws to voting members of the MAA, rather than to the Board of Directors. This way every member of the MAA still has some voice in the governance of the association.

Go to the MAA website if you would like to read more about the revised bylaws. While there, you may notice changes to the site. An initiative known as "MAA 101 Refresh" is underway to introduce a fresh look and improved navigation to the website and to "launch forward thinking blogs and a digital career resource center that transmit the beauty and importance of mathematics to the MAA audience and the world." Click on "MAA 101 Refresh" on the MAA homepage to read about this initiative and to give your feedback on this work in progress.

(Continued on page 3)

TEACHING tidbits blog



Professor Lew Ludwig of Denison University is happy to announce the new <u>Teaching Tidbits</u> blog that he helped create for the MAA. The goal of the blog is to provide ideas that you could read on your smartphone or tablet on the way to class, then try the same day. Visit <u>http://</u>

Governor's Report on New Bylaws (Continued from page 2)

As part of his Treasurer's report at the Board of Governors meeting, Jim Daniel said that in spite of a record projected deficit of \$850K for the 2017 budget, he was more optimistic about the future financial state of the MAA than he had been in recent years. He said that because of projected initiatives, including expected changes to MAA publications partnerships, there is a good chance that the actual 2017 budget deficit may be as low as about \$250K. Some good financial news is that the MAA Second Century Campaign which ran from 2012 through 2016 exceeded its goal of raising \$7.5 million. Looking ahead, MAA has begun a campaign to raise funds to cover the costs of hosting the International Math Olympiad in 2021.

In his report, MAA executive director Michael Pearson shared with the board that the American Mathematics Competitions program is about more than competition among students. An important goal of the AMC is to educate teachers, parents and students about what the MAA values. Pearson noted that the "Curriculum Inspirations" materials developed by James Tanton and posted at <u>www.maa.org/math-competitions</u> are available to everyone, not just those who participate. I encourage you to see these for yourself! Tanton's multimedia posts, intended for the middle and high school communities, are very clever and fun.

Pearson also said that MAA successes include Project NExT, but every year the MAA says no to 50 to 60 new faculty who apply to be a part of Project NExT. Pearson said that the MAA is committed to finding a way to include all faculty who want to be a part of Project NExT with a goal of doing this no later than MathFest in 2019.

<u>maateachingtidbits.blogspot.com/</u>. The posts will appear every other Tuesday during the semester and will be written by the editors or guest authors. Lew is the editorin-chief. If you have any tips or suggestions, please send to <u>ludwigl@denison.edu</u>.

At the Board of Governor's meeting we were asked to share with the section the following statement from the MAA Meetings Management Committee and Executive Committee. These statements were approved by the MAA Executive Committee on October 28, 2016, to be included in future MAA MathFest hotel contracts:

"It is the Group's official position that it will make every reasonable effort to schedule its national meetings in localities which respect the participants' human rights and freedom from discrimination based on sexual orientation, gender, race, national origin, creed or color. The Mathematical Association of America encourages the free expression and exchange of ideas in an atmosphere of mutual respect and collegiality. The MAA strives to foster a welcoming environment for all.

While MAA does not control the behavior of third parties, the MAA requests that all individuals involved in MAA, its Sections, or its Special Interest Groups, conduct themselves professionally and respectfully toward its conferences' participants, staff, and vendors. Through this contract the Hotel and/or Convention Center represents to the MAA that they will do everything in their power to create a welcoming environment based on MAA's above stated policies."

I look forward to serving you as your Ohio Section Representative to the MAA Congress. And I hope to see you at our section meeting in Dayton this spring and at MathFest in Chicago.

> Bill Higgins Wittenberg University Governor of the Ohio Section

President Shares a Message with Fun Math Facts

Before accepting the nomination to be the president of the Ohio Section of the MAA, I asked some past presidents about the time commitment and the responsibilities involved with the position. A few of these

presidents mentioned that what they were most anxious about as president was delivering the retiring president's address. I was/am not too nervous about this, maybe because it is still a year away. However, what I have discovered as come to the conclusion of my first year as president is a difficulty in determining



what to write about for the president's message in the Ohio Focus. To be honest, I had not always read all of the past presidents' messages, maybe because I felt I was already aware of much of what was written in these messages. So what am I going to write in my messages to keep you reading this far? Thanks to those of you who have read this far and to anyone who has not read this far, "Your mother was a hamster and your father smelt of elderberries." (I feel comfortable inserting this insult from "Monty Python and the Holy Grail" since anyone for whom the insult is intended won't be aware of the insult anyway.) I have decided that a key to writing an effective message that people will read is very similar to a key to teaching an effective class - know your audience. With an audience of fellow math enthusiasts, I have decided that in this message and in the two future messages that I will write, I am going to include "math fun facts."

MAA president Francis Su, who I believe will be past president by the time that you read this, is the creator and author of the Math Fun Facts website (<u>https://</u><u>www.math.hmc.edu/funfacts/</u>) that is hosted by Harvey Mudd College. If you are not familiar with this website, I highly suggest you check it out. I have used these Math Fun Facts to give small presentations to our math club or to share at the beginning of some of the classes that I teach. You can search the facts by topic or key words, filter by difficulty, see the Top 40 Math Fun facts or just select a random fun fact. Here is the 2nd most popular fun fact as of 1/27/2017:

Powers of Ten in Base Two and Five:

Make two lists; one consists of all powers of 10 in base 2, and the other all powers of 10 in base 5:

(base 2) 1010, 1100100, 1111101000, ...

(base 5) 20, 400, 13000, 310000, ...

Fun Fact: for any integer N > 1, there is exactly one number in exactly one of the lists that is exactly N digits long! (Su, Francis E., et al. "Powers of Ten in Base Two and Five." *Math Fun Facts.* <<u>http://www.math.hmc.edu/funfacts</u>>.)

And now, back to our regularly scheduled message. I wish to thank the Program Committee chaired by Laurie Dunlap and the local arrangements coordinator Drew Pasteur for their magnificent service in planning the Fall 2016 Meeting of the Ohio Section at the College of Wooster. The Program Committee has planned another delightful meeting for us at the Sinclair Community College in Dayton, Ohio this spring featuring invited speakers Michael Pearson, Executive Director of the Mathematical Association of America, M. B. Rao of the University of Cincinnati and Lola Thompson of Oberlin College. I look forward to seeing you March 31-April 1 in Dayton, Ohio. While you are in Dayton, you may wish to check out the National Museum of the U.S. Air Force, the Wright Cycle Company Complex or some of the other area attractions. As I assume most of you know, the Wright Brothers lived in Dayton, Ohio, explaining why the Ohio license plates include the slogan "Birthplace of Aviation." I do have mixed feelings about this as maybe if the Wright Brothers hadn't lived in Ohio, our license plates would have included the slogan, "Birthplace of the MAA." Dare to dream, dare to dream...

Chris Swanson Ashland University President of the Ohio Section

MAA Connection to Hidden Figures

At the spring 2000 meeting of the Ohio Section, held at Marshall University, West Virginia native Katherine Coleman Johnson gave an after-dinner talk about her experiences during a 33-year career in NASA's Space Flight Division. In 2015 Johnson was honored at the White House with a Presidential Medal of Freedom. The Academy Award-nominated film *Hidden Figures* highlights the important work of Johnson and other African American women at NASA, leading up to the 1962 successful orbital flight by Ohioan John Glenn in Freedom 7.



Leo Schneider Student Mathematical Competition

Undergraduate students from institutions of the Ohio section are invited to participate in the seventh annual Leo Schneider Student Mathematics Competition.

This year's competition will take place on Friday from noon until 1:20. Rules and registration information, as well as copies of previous years' problems and their solutions, can be found on the Ohio Section Student Member website, <u>http://constum.ohiomaa.org/</u>. Cash prizes (\$150 for first place, \$120 for second, and \$90 for third) will be awarded on Saturday to the top three teams. We encourage student participation in the entire meeting, including student talks, the student pizza party, and the "awards ceremony" on Saturday. Any questions about the competition or other student activities can be addressed to Tom Wakefield at tpwakefield@ysu.edu.

Try your hand at this problem from the 2016 Leo Schneider Student Mathematics Competition: Solutions are available at the CONSTUM website, <u>http://constum.ohiomaa.org/</u>.

Problem 9: The rhombicosidodecahedron is an Archimedean solid with faces that are equilateral triangles, squares, and regular pentagons. It has 60 vertices and 120 edges. If 20 of the faces are triangles and 12 are pentagons, how many must be squares?

Resources for Speakers

Speakers are encouraged to check out these resources that provide tips and strategies for giving good math and science presentations:

"Technically Speaking," funded by the NSF and hosted by Denison University, at <u>http://techspeaking.denison.edu/</u>.

"Advice on Giving a Good Power Point Talk," *Math Horizons* article by Joe Gallian (April 2006), at <u>www.d.umn.edu/~jgallian/goodPPtalk.pdf</u>.

Student Pizza Party

A student pizza party will be held on Friday evening at 6:30. There is no charge but meeting registration is necessary. See the Section webpage at <u>www.maa.org/Ohio</u> for online registration. A Sudoku tournament will be held during the pizza party for interested students.

Talks by Students

and Undergraduates graduate students are encouraged to submit abstracts for 15 minute talks at the Spring Meeting. Topics may be drawn from any area of mathematics or а related discipline. The presentation may be an expository talk, a recounting of a mathematical internship or a co-op experience, or the results of a research project. It is expected that each talk will be delivered by a single speaker. Each student speaker will receive a certificate acknowledging his/her contribution to the meeting.

Contributed talks by students, faculty, and others will be given on Friday afternoon and Saturday morning. Talks will be scheduled primarily according to topic and audience level. Student talks are an integral part of the meeting and should be an enjoyable and rewarding experience for all who participate.

See the Call for Contributed Papers on page 9 for information about submissions. Applications should be completed by Friday, March 17.



Nominations for Section Officers

The election of officers will take place at the Business Meeting, Friday evening, March 31. At that time, nominations for other candidates may also be taken from the floor. The President-Elect serves for one year and then becomes President for two years. The senior person on the Program Committee serves as the chair of that committee. The Secretary-Elect serves in the position for one year and then becomes the Secretary for a three-year term.



The Nominating Committee is pleased to nominate **Katie Cerrone-Arnold** for **President-Elect**. Katie is an Akron Zip through and through. She received her B.S. in Mechanical Engineering from UA in 2004 followed by her M.S. in Mathematics in 2006. After taking a short break to travel she returned to UA as a faculty member in the College of Applied Science and Technology in 2007 and began working on her Ph.D., which she received in 2012. Her research interests are student transition from high school to college and the use of technology to improve instruction. Katie first became active in the section by attending the Ohio NExT workshops, which she has always found extremely worthwhile as she enjoys meeting new section members and learning how others are improving their teaching. She has served as the OMSC Liaison, been a member of CONTEAL and currently serves as the Ohio NExT Co-coordinator. She looks forward to serving the section in her new role.

The Nominating Committee is pleased to bring forward **Barbara D'Ambrosia** as a candidate for **Secretary-Elect**. She is a professor of Mathematics at John Carroll University in Cleveland, Ohio. She has been teaching at JCU since completing her Ph.D. at the University of Oregon in 1994. In 2003, Barbara received the university's Lucrezia Culicchia Excellence in Teaching Award. Early in her career, she published research papers in the area of noncommutative ring theory. More recently, she has turned her attention to developing mathematical demonstrations using GeoGebra and various faculty governance positions at John Carroll.

Barbara is a 1995-96 Project NExT Fellow (green dot), and is active in the Ohio Section of the MAA. She has served as chair of the Section's Committee on Student Members, as a member and chair of the Program Committee, as the editor of *Ohio Focus*, and as Governor of the Section. In addition, she chaired the committee that revised the Section bylaws in 2014-2015, and many years ago she was the local arrangements coordinator for a Section meeting.



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About Sinclair Community College

Sinclair Community College celebrated its 125th anniversary in 2012. It was named after David A. Sinclair, a Scottish immigrant who was raised in Canada. Mr. Sinclair worked in the Dayton area as Secretary of the YMCA to improve the situation for the many unemployed. Because a key condition for the economic situation was a lack of skills or training, the first classes, in Bookkeeping and Mechanical Drawing, were offered to 55 students.

Today, with an enrollment of 32,000 students, Sinclair is among the largest community colleges in America. They offer classes at the downtown Dayton campus, as well as at a campus center in Mason, regional centers in Englewood, Huber Heights and Eaton, online, and at Wright-Patterson Air Force Base, making them accessible to everyone in Southwest Ohio and beyond. They are also proud to be members of the board of the League for Innovation in the Community College.

Registration Information for Spring 2017 Meeting

Online registration is preferred. Visit the Section web site at <u>http://www.maa.org/Ohio</u> on or after Tuesday, February 14, for one-stop registration, banquet reservation, and abstract submission. The deadline for meeting pre-registration and banquet reservations is March 24. Abstracts for contributed papers must be submitted by March 17.

On-site meeting registration is always available, but lastminute banquet tickets cannot be guaranteed. Early registration helps those making the meeting arrangements and is always appreciated. Registration will be held beginning 12:00 pm on Friday in the Lobby of Building 4 and will continue Saturday morning at 8:00am.

Meeting participants who are unable to register online at <u>http://www.maa.org/Ohio</u> may register by mail by sending the following information: name, affiliation, address, phone, e-mail address (if any), type of position, and banquet buffet reservation. Send with check, payable to Ohio Section MAA, for applicable fees [registration fee (\$30 ordinary registration, \$15 retired or part-time, no fee for students or first-time attendees), banquet buffet fee (\$24 per person)] to:

Ohio Section MAA Spring Meeting, c/o Najat Baji, Math Dept, Room 1-341 Sinclair Community College Dayton, OH 45402. Registration by mail will be pending receipt of registration fees.

News Across the Section

Otterbein University reports that Dr. **Ryan Berndt** has taken over as chair of the department. We thank Dr. **Pete Sanderson** for his service as the chair previously.

At **Sinclair Community College**, **Laura Phelps** was appointed as an Assistant Professor beginning in spring 2017. Kerry Bentjen and **Phyllis Eby** joined the department as Annually Contracted Faculty in fall 2016 and **Hoai Tran** joined the department as an Annually Contracted Faculty in spring 2017.

The Department of Mathematics and Computer Science at John Carroll University welcomes Shurong (Rebecca) Fang, Assistant Professor of Statistics. Rebecca is currently in a visiting position, and will transition to a tenure-track position in Fall 2017. She earned her Ph.D. in Statistics from Michigan Technological University in 2013, and then taught at Fairfield University from 2014-2016. Tom Short, Professor of Statistics, left JCU in July 2016 to accept a position at West Chester University in Pennsylvania.

At **Baldwin Wallace**, Dr. **Melissa Dennison** has been promoted to the rank of Associate Professor. Congratulations to Dr. Dennison!

The Mathematics program at Baldwin Wallace has been approved to offer a Bachelor's of Science in Applied Mathematics. They will start enrolling students in this program in the Fall of 2017.

Officer Nominations

(Continued from page 6)

The Nominating Committee is pleased to nominate **Moez Ben-Azzouz** for the **Program Committee**. Moez Ben-Azzouz is a tenured mathematics professor at Sinclair Community College in Dayton, Ohio. He started at Sinclair in 2002 and joined in a tenure-track capacity in 2004. He has also taught in an adjunct capacity at Wittenberg University, in Springfield, Ohio since the summer of 2006. He holds a master of science degree in pure mathematics and a bachelor of science degree in computer engineering, with dual major in mathematics, both from Wright State University, Dayton, Ohio. He also holds several IT certifications. He is fluent in French, Italian, Arabic, and English, as well as several computer languages. His main interests include: dynamical systems, differential equations, number theory, cryptog-

raphy, history of mathematics, computer programming, machine learning, and getting students excited about learning math. He has recently been nominated by his colleagues at Sinclair for the 2017 Susan Roueche Teaching Excellence Award from the League of Innovation. His hobbies include: soccer, reading history books, web and app devel-



opment, networking with colleagues at math conferences, and spending time with his wife Linda and his two standard poodles: Rooney and Suzee.

J. Michael Pearson, Executive Director of the MAA, Washington, D.C. "Solving Problems: MAA American Mathematics Competitions and Evolving Views of Mathematics Education"



Through its years as the American High School Mathematics Examination and now as the AMC, MAA competitions programs illustrate the evolving views of what effective constitutes mathematical problem solving, as well as identifying and cultivating mathematical talent.

We'll take a leisurely tour through more than a halfcentury of the Association's efforts to advance mathematics through competitions. **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, he served on the faculty at Florida International University (1989-1992) and Mississippi State University (1992-2002).

As Executive Director, Michael provides leadership to further the mission of the MAA to advance the mathematical sciences. 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.

Lauren "Lola" Thompson, Oberlin College "Twin Primes and Their Kin" "Bounded Gaps Between Primes"

The question of whether there are infinitely many pairs of twin primes has puzzled mathematicians for hundreds (if not thousands) of years. Until recently, it was not even known whether there are infinitely many pairs of primes that differ by a finite number. In 2013, Yitang Zhang stunned the mathematics community by proving that there are infinitely many pairs of primes that differ by at most 70,000,000. While 70,000,000 is still quite far from 2, Zhang's work has inspired a flurry of activity on this problem, giving reason to hope that a resolution to the Twin Primes Conjecture is within reach. In this talk, I will discuss the current state-of-affairs of the Twin Primes Conjecture, and I will mention some of my own work on related problems. This talk will be accessible to undergraduate students.



We will give a broad explanation of the proofs that there are bounded gaps between primes, highlighting the differences in the approaches taken by Yitang Zhang versus James Maynard and Terence Tao. We will discuss how Maynard and Tao's approach, in particular, can be adapted to answer some questions about sequences of consecutive primes that were of interest to Paul

Erdős. This talk is based on joint work with Paul Pollack. 3, 5 5, 7 11, 13 17, 19 29, 31 ...

Lola Thompson is an Assistant Professor of Mathematics at Oberlin College. She received a B.S. in mathematics and a B.A. in economics from the University of Chicago in 2007. Lola went on to earn her Ph.D. from Dartmouth College in 2012 under the direction of Carl Pomerance. She subsequently spent one year as a VIGRE postdoctoral fellow at the University of Georgia. Lola is a national Project NExT fellow (Brown '13 dot) and has participated in the Ohio Section NExT workshops. She is spending the 2016-2017 academic year as a visiting researcher at the Max Planck Institute for Mathematics in Bonn and at the Mathematical Sciences Research Institute in Berkeley.

Lola's research interests lie in number theory, particularly in problems with an elementary, analytic, or combinatorial flavor. She first fell in love with number theory (and the state of Ohio) when she was a student in the Ross Mathematics Program at The Ohio State University.

Marepalli "MB" Rao, University of Cincinnati

"Brain Tales"

We are a very young species. Yet, we are so dominant on this earth. In this presentation, we muse and speculate on this. We present a number of data sets to either buttress an argument or debunk it.

"Some Entertaining Problems and Puzzles from Probability and Statistics"

During my long career in academia, I have collected and devised a number of entertaining problems from Probability

and Statistics. I want to share some of these with you.

MB Rao is a Professor and Program Director at the University of Cincinnati. He works in the Division of Biostatistics and Bioinformatics in the College of Medicine, and the Department of Biomedical Engineering in the College of Engineering. He received his Ph.D. in Statistics at the Indian Statistical Institute in 1973. He was an Assistant Professor at the University



of Sheffield in the United Kingdom starting in 1972, a Visiting Professor at the University of Pittsburgh starting in 1983, a Professor at North Dakota State University starting in 1987, and has been at the University of Cincinnati since 2004. MB is a Fellow of the Institute of Mathematical Statistics. the American Statistical Association, the American Association for the Advancement of Science, and the International Statistical Institute. He was also President of the MAA North Central Section for one year.

MB has published approximately 300 papers in a range of areas including measure theory, topology, matrix algebra, functional analysis, probability, limit theorems, multivariate analysis, time series, linear models, survival analysis, and big data. He is also the joint author of two books: "Theory of Charges (Finitely Additive Measures)" from 1983, and "Matrix Algebra and Its Applications" from 1999, as well as the joint editor of "Computational Statistics with R" from 2015. Dr. Rao has guided approximately 30 Ph.D. students and 40 M.S. students.



Call for Contributed Papers

Fifteen-minute presentations on any topic of general interest in mathematics or related areas are encouraged for the Contributed Paper Sessions on Friday afternoon and Saturday morning at the spring Ohio Section meeting. Your reports on projects, research announcements, or anything you believe would be of interest to those in attendance are welcome. Contributors should send a title and brief abstract by Friday March 17.

Online submission with your meeting registration (at <u>http://sections.maa.org/ohio/</u>) is strongly preferred, but if necessary, you may submit your title and abstract to the chair of the Program Committee, Laurie Dunlap, by e-mail at <u>dunlapL@uakron.edu</u>, or by U.S. mail at

Laurie Dunlap

The University of Akron Mathematics Department, Akron, OH 44325-4002.

Abstracts should be between 25 and 75 words in length and should employ proper English grammar and spelling. One speaker per session is greatly preferred, but two speakers in one session can be accommodated if necessary. Please use only plain text in your title and abstract as the abstract submittal system cannot process TeX or other graphics code.

Each presentation room will have a PC, a computer projector, and laptop connections. Presenters can either plug their laptops into the overhead projection system or plug a flash drive into the resident computer. If you wish to project from an Apple device then you must bring your own adapter. Internet access will be provided. Specific questions about technology availability should be addressed to Najat Baji at <u>najat.baji@sinclair.edu</u>. You may submit abstracts online at the Section web page: http://sections.maa.org/ohio.

Spring Meeting Program

Friday, March 31		
12:00-4:00	Registration	Building 4 Lobby
12:00-1:20	Leo Schneider Student Team Competition	7-006
12:00-1:00	Committee Meetings:	
	CONCUR (Curriculum)	1-221
	CONSACT (Section Activities)	2-334
	CONTEAL (Teacher Education & Licensure)	1-346A
1:00-4:00	Vendor & Book Exhibits	Building 4 Lobby
1:30-1:45	Welcome and Announcements	4-011
1:45-2:45	Invited Address: 'Brain Tales'' Marepalli "MB" Rao	4-011
2:45-3:00	Break	Building 4 Lobby
3:00-4:00	Invited Address: 'Solving Problems: MAA American Mathematics Competitions and Evolving Views of Mathematics Education " J. Michael Pearson	4-011
4:10-5:50	Executive Committee Meeting	2-334
4:15-6:30	Contributed Paper Sessions	4-242, 4-233, 4-232, 4-225, 4-211
6:30-7:00	Social Time	7-001
7:00-8:00	Student Pizza Party	Building 7 Dining Hall Tartan Market Pl
7:00-8:00	Banquet	7-006
8:00-9:00	Invited Address: 'Twin Primes and their Kin" Lauren "Lola" Thompson	4-011
9:00	Business Meeting and Presentation of Teaching Award	2-334

Saturday, April 1			
8:00-10:00	Registration	Building 4 Lobby	
8:00-10:00	Book Vendors and Exhibits	Building 4 Lobby	
8:00-8:50	Coffee and Pastries	Building 4 Lobby	
8:15-8:50	Committee on Local Arrangements	4-242	
8:15-8:50	Executive Committee Meeting (if needed)	4-233	
9:00-9:10	Welcome and Announcements; Student Competition Results	4-011	
9:10-10:10	Invited Address: "Some Entertaining Problems and Puzzles from Probability and Statistics" Marepalli "MB" Rao	4-011	
10:10-10:30	Break	Building 4 Lobby	
10:30-11:45	Contributed Paper Sessions	4-242, 4-233, 4-232, 4-225, 4-211	
11:45-12:00	Break	Building 4 Lobby	
12:00-1:00	Invited Address: "Bounded Gaps Between Primes" Lauren "Lola" Thompson	4-011	
1:00-1:10	Closing Remarks	4-011	

Event locations are subject to change. Check the official program you receive when you register for the meeting in the atrium of Building 4. Also, check the Section web page, www.maa.org/Ohio, for program updates, online registration, and contributed paper submissions.

Travel and Hotel Information

Directions (to parking LOT A)

Lot A is an open access lot. Entrance and exit from West Fifth Street and Mead Street. Most of the meeting activities are in building 4. Another map of campus is available at http://www.sinclair.edu/about/visit/maps-directions/#dayton

From the North (Toledo, Columbus, Cleveland)

Take I-75 South to the Main Street exit and turn left. Follow Main Street until you reach Fourth Street. Turn right onto Fourth Street and continue down Fourth Street. From the left lane, there is a turnoff to Fifth Street for the Lot A parking garage.

From the South (Cincinnati, Kentucky)

Take I-75 North to 35 East toward Xenia. Merge left to SR 48 (Main ST./Jefferson St.). Stay right to merge onto Jefferson Street. Turn left on Fourth Street. Continue down Fourth Street, and from the left lane, there is a turnoff to Fifth Street for the Lot A parking garage.





2016-2017 Ohio Section Officers and Committees

ELECTED OFFICERS

President

Chris Swanson, Ashland University (2018) 419-289-5264; cswanson@ashland.edu

Past-President

Daniel Otero, Xavier University 513-745-2012; otero@xavier.edu (2017)

Section Governor

William Higgins, Wittenberg University 937-327-7859; whiggins@wittenberg.edu (2018)

Secretary

Pamela Warton, University of Findlay 419-434-4147; warton@findlay.edu (2018)

Treasurer

Brian Shelburne, Wittenberg University 937-327-7862; bshelburne@wittenberg.edu (2019)

OTHER OFFICERS

Department Liaisons Coordinator

Chris O'Connor, Shawnee State Univ 740- 351-3309; coconnor@shawnee.edu (2017)

Webmaster

Darren Wick, Ashland University 419-289-5795; dwick@ashland.edu (2017)

On-line Registration

G. Jay Kerns, Youngstown State University 330-941-3310; gkerns@ysu.edu (2017)

Newsletter Editor

David Stuckey, Defiance College 419-783-2464; dstuckey@defiance.edu (2018)

OhioMATYC Liaison to OhioMAA

Jim Anderson, University of Toledo 419-530-7296; jim.anderson@utoledo.edu

OCTM Liaison

Aaron Blodgett, University of Findlay 419-434-6920; Blodgett@findlay.edu (2018)

Archivist

Daniel Otero, Xavier University 513-745-2012; otero@xavier.edu (2020)

COMMITTEES

* Denotes committee chair. Elected Officers and Committee Chairs are voting members of the Executive Committee. Terms expire at the end of the Spring meetings of the year listed. See the Bylaws.

Ohio NExT Organizing Committee

*Katie Cerrone Arnold, University of Akron 330-927-8809; kc24@uakron.edu (2017) Chandra Dinavahi, U. of Findlay 419-434-6598; dinavahi@findlay.edu (2018) Michael Schroeder, Marshall U. 304-696-6643 schroederm@marshall.edu (2019)

CONTEAL

*Aaron Blodgett, Univ of Findlay (2017) Najat Baji, Sinclair Comm College (2017) Laurie Dunlap, University of Akron (2017) Susan Thompson, Otterbein University (2017) James Fitzsimmons, Wilmington Coll (2019) Jenna Van Sickle, Cleveland State U. (2019)

CONSTUM

*Tom Wakefield, Youngstown State U. (2019) Matthew McMullen, Otterbein Univ (2017) David Gerberry, Xavier University (2018) Melissa Dennison, Baldwin Wallace U. (2019) Matt Davis, Muskinghum University (2019)

CONSACT

*Paige Rinker, John Carroll University (2018) Kathryn Leed, Lorain Cty Comm Coll (2017) Flavia Sancier-Barbosa, Antioch Coll (2017) M B Rao, University of Cincinnati (2019) Aurel Stan, Ohio State University (2019) Yong Wang, Ohio Northern University (2019)

CONCUR

*Chandra Dinavahi, U. of Findlay (2019) Syvillia Averett, Central State Univ (2017) William Fuller, Ohio Northern Univ (2017) Mihai Caragiu, Ohio Northern Univ (2019) Glen Lobo, Sinclair Comm College (2019)

OTHER COMMITTEES Program Committee

*Laurie Dunlap, University of Akron (2017) Barbara Margolius, Cleveland State U. (2018) Michael Schroeder, Marshall Univ (2019)

Nominating Committee

* Phil Blau, Shawnee State Univ (2017) Adam Parker, Wittenberg Univ (2018) Chris Swanson, Ashland University (Pres) Pam Warton, University of Findlay (Secretary, nonvoting)

Teaching Award Committee

* Daniel Otero, Xavier University (Past President) (2017) David Meel, Bowling Green State U. (2017) Bonita Lawrence, Marshall University (2018) Pam Warton, University of Findlay (Secretary, nonvoting)

LOCAL ARRANGEMENTS FOR MEETINGS

Spring 2017: Sinclair Community College Najat Baji, najat.baji@sinclair.edu

Fall 2017: Ohio University - Eastern John Prather, prather@ohio.edu

OHIO FOCUS

The newsletter of the Ohio Section of the Mathematical Association of America first appeared in 1973 and is published twice yearly, in time to reach members before the fall and spring meetings. Newsletters are published online at <u>www.maa.org/Ohio</u>. Notification postcards are sent using labels provided by the MAA.

Editor: David Stuckey 419-783-2464 <u>dstuckey@defiance.edu</u> Defiance College 701 N Clinton Defiance, OH 43512

The deadline for the next newsletter is **August 14, 2017**. E-mail copy is preferred. Early submission is appreciated. Please send copy to the editor (see above), and also to the Section Webmaster, Darren Wick (<u>dwick@ashland.edu</u>), for posting on the web.

Calendar

Ohio Section Meetings

Spring 2017 Annual Meeting, March 31 - April 1 Sinclair Community College, Dayton, Ohio

Fall 2017 Section Meeting, October 27 - 28 Ohio University - Eastern, St. Clairsville, Ohio

Spring 2018 Annual Meeting, April 6 - 7 Miami University, Oxford, Ohio

National MAA-AMS Meetings

MAA Distinguished Lecture Series: *How George Washington Learned to be a Surveyor* February 22, 2017, Carriage House, Washington, D.C.

MAA Distinguished Lecture Series: *Movie Magic: The Mathematics Behind Hollywood's Visual Effects* March 1, 2017, Carriage House, Washington, D.C.

MathFest, July 26 - 29, 2017, Chicago, IL

Annual Joint Meetings, January 10 - 13, 2018, San Diego, CA

MathFest, August 1 - 4, 2018, Denver, CO

Annual Joint Meetings, January 16 - 19, 2019, Baltimore, MD

MathFest, July 31 - August 3, 2019, Cincinnati, OH



Annual Joint Meetings, January 15 - 18, 2020, Denver, CO

MathFest, July 29 - August 1, 2020, Philadelphia, PA

Annual Joint Meetings, January 6 - 9, 2021, Washington, D.C.

MathFest, August 4 - 7, 2021, Sacramento, CA

Thank You to the many people who work together to help with this newsletter as well as the meetings and other programs of the Ohio section. *David Stuckey, Editor*

Other Meetings: Ohio and Surrounding States

Indiana Section MAA Section Meeting, March 24 - 25, 2017, Earlham College, Richmond, IN <u>http://sections.maa.org/indiana/</u>

Kentucky Section MAA Section Meeting, March 24 - 25, 2017, Berea College, Berea, KY <u>http://sections.maa.org/kentucky/meetings/</u> <u>kymaaAnnual2017/indexAnnual2017.shtml</u>

Michigan Section MAA Section Meeting with MichMATYC, March 31 - April 1, 2017, Feris State University, Big Rapids, MI http://mcclendonmath.com/maa2017.html

Central Section AMS, April 1 - 2, 2017, Indiana University, Bloomington, IN http://www.ams.org/meetings/sectional/sectional.html

Allegheny Section MAA Section Meeting, April 7 - 8, 2017, Duquesne University, Pittsburgh, PA <u>http://sections.maa.org/allegheny/</u>

OCTM Annual Meeting, October 19 - 20, 2017, Columbus Convention Center, Columbus, OH <u>http://www.ohioctm.org/conferences/67th-annual-</u> <u>conference-columbus</u>

Other National Meetings

International Conference on Technology in Collegiate Mathematics (ICTCM), March 9 - 12, 2017, Chicago, IL http://www.pearsonhighered.com/ictcm/

T³ International Conference, March 10 - 12, 2017, Chicago, IL http://education.ti.com/en/us/pd/international

NCTM National Meeting, April 5 - 8, 2017, San Antonio, TX <u>http://www.nctm.org/Conferences-and-Professional</u> -Development/Annual-Meeting-and-Exposition/

Joint Statistical Meetings, July 29 - August 3, 2017, Baltimore, MD http://www.amstat.org/meetings/jsm/2017/index.cfm

AMATYC Annual Conference, Nov 9 - 12, 2017, San Diego, CA <u>https://amatyc.site-ym.com/?</u> 2017ConfHome