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The MAA Ohio Section Newsletter

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Ohio Section Centennial Celebration Scheduled at Ohio Northern University



The Mathile Scholars with Dr. and Mrs. Mathile, Dr. and Mrs. Baker in front of the Mathile Center, where registration, contributed paper sessions, and social time will occur.

The 100th Annual Meeting of the Ohio Section of the MAA will take place April 8 - 9, 2016 at Ohio Northern University in Ada, Ohio. As usual, the Leo Schneider Student Team Competition and committee meetings begin the program at 12:00 p.m. with opening welcome at 1:30 p.m. Danny Otero (Xavier University) and Dan Baczkowski (University of Findlay) will be giving the afternoon addresses. After dinner remarks on Benjamin Finkel will be shared by Fred Rickey (retired, Bowling Green State University, West Point). Saturday morning's events will include two presentations by Jenna Carpenter (First Vice President, National MAA). There will also be contributed paper sessions on both Friday afternoon and Saturday morning for meeting Graduate and undergraduate students in participants. mathematics, mathematics education, or related fields are encouraged to attend.

Historical Booklet Distribution at MAA Meeting

We are eagerly looking forward to the 100th Annual Meeting of the MAA Ohio Section. As you read this issue of Ohio Focus, the book, A Centennial History of the Ohio Section of the Mathematical Association of America: 1915-2015, should be at the printer. All pay-



ing attendees at the upcoming spring meeting will be offered a free copy of this book.

The program will feature several talks on the history of mathematics. Fred Rickey will present an invited address highlighting Benjamin F. Finkel, founder of The American Mathematical Monthly and a graduate of Ohio Northern University. Also Jenna Carpenter will tell us about women's contributions to the history of computing, and Danny Otero's retiring President's address will focus on G. W. Leibniz, who died 300 years ago this year. Members of the Section who have been working on histories of mathematical science departments at their own institutions are especially encouraged to submit an abstract for a contributed paper.

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Governor Reports on Potential Changes at the National Level

The Board of Governors (BOG) meeting in Seattle was my first BOG meeting at a joint math meeting and the second of the six BOG meetings I'll attend as governor. Shortly after I was elected I received a congratulatory email from Tom Hern in which he noted that I will be "remembered as the last section Governor of the first century of the Ohio Section." It turns out that I may be one of the last governors from the Ohio Section as well.



As I reported after MathFest in August, the MAA is considering significant changes in its governance structure. At MathFest the BOG considered three alternatives for a revised governance hierarchy

and at the Seattle meeting we were given two governance models to consider. Both models presented in Seattle contain an Assembly and a smaller Board of Directors. The 9 Board of Directors has members: President (serving 4 years, one as President Elect, 2 as President and 1 as Past President); President Elect or immediate Past President; Vice President (the President and Vice President would be elected nationally); Chair of the Assembly (elected by the Assembly from its members); Secretary; Associate Secretary; Treasurer; Chair of the Committee on Sections (elected by the Assembly); and Director at Large (elected by the Assembly).

The duties of the Board of Directors would include review and approval of the budget and executive oversight. It is hoped that this smaller governing body would be able to act more quickly and more effectively than the current Board of Governors which has 52 voting members. At the 2014 MathFest, the BOG identified strategic planning, checks and balances, communication and representation as key priorities for any governance restructuring.

The primary difference between the two models presented is the size of the Assembly. It was decided that the model that continues the practice of having a representative (now called a Governor) from each of the 29 sections would be preferable to the other model in which the Assembly would have 10 regional section representatives. In addition to the 29 section representatives, the Assembly would contain 7 Council Chairs, all members of the Board of Directors and about 6 members at large.

In each of the two governance models presented, the Assembly would have had very little power and would have acted primarily in an advisory capacity to the Board of Directors. There was wide agreement among the BOG that the Board of Directors should have control over budget matters. But there was also wide agreement that an Assembly that acts only in an advisory capacity would not fit with the goal of having "checks and balances."

The BOG decided that it would be more appropriate for the Assembly to have a larger role in strategic planning and in issues related to the MAA Bylaws. The following two motions were passed in Seattle – (1) "It will be the responsibility of the Assembly to approve strategic goals and priorities. It will be the responsibility of the Board of Directors to propose and implement strategic plans." And (2) "The approval of changes to MAA Bylaws in advance of action by the general membership will be the responsibility of the Assembly (in consultation with the Board of Directors)."

I hope that I have quoted these motions correctly, but it is not crucial since the goal in Seattle was for the BOG to vote on a broad structure for governance restructuring with details to be worked out by a task force and a more precise proposal brought to the Board of Governors for approval. Changes would not be implemented unless and until the necessary changes to the bylaw were approved by the general membership of the MAA.

The Treasurer of the MAA, Jim Daniels, reported that he has become more pessimistic about the financial challenges facing the MAA. At the end of 2015, the MAA had 11 consecutive years of annual budget deficits with an average annual deficit of about \$200,000 per year over those 11 years. Note that the annual budget of the MAA is now about \$7.9 million so deficits of this size are far from insignificant. He stated that the MAA has a persistent revenue problem created by reduced membership and reduced book and journal sales and that this is a problem that will take time to cure. He also said that the MAA is not in any immediate danger – but

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Marshall University to Host Summer REUs on Combinatorics

Marshall University will host a mathematics REU in Summer 2016 and 2017 focusing on combinatorics. The program will host nine students each year in Huntington, WV. Applications for the Summer 2016 program will open in February with a deadline of March 31. Applications will continue to be accepted until all positions are filled. Students from the Ohio, Kentucky, Virginia, and West Virginia region are encouraged to apply,

Governor's Report

(Continued from page 2) we cannot continue with budget deficits forever. If you have not already done so, please consider taking part in the ongoing fundraising efforts of the MAA. And if you are not currently an MAA member, please consider becoming one.

Executive Director Michael Pearson shared some good news. 2015 was the first year in 11 that the MAA had growth in membership. There was growth in the core (i.e full paying) membership from 9776 to about 10,000 members. There was also a large increase in the number of student members thanks primarily to the new revamped departmental membership structure. If your department is not already a member I hope you will look into the possibility of joining!

A new award was approved by the BOG that has an Ohio connection. The Daniel Solow Author's Award recognizes an author or authors of exemplary undergraduate teaching materials. The award was proposed and funded by Daniel (Danny) Solow, Professor in the Department of Operations at the Weatherhead School of Management at Case Western Reserve University and long-time member of MAA. The initial value of the award is \$2,500, to be presented annually at MAA MathFest. The award will be made without regard to publisher. Prof. Solow's motivation for establishing the award comes from his success as the author of undergraduate texts, and in particular his How to Read and Do Proofs, the first text written for a course on introduction-to-mathematical-proofs. Nominations should be sent by October 15, 2016 to the MAA secretary at secretary@maa.org . See www.maa.org for more information.

Don't forget that Ohio will play host to MathFest this August in Columbus. I encourage you to attend! There is

as are first-generation college students, women, and students from traditionally underrepresented groups. The faculty mentors in 2016 are Elizabeth Niese (PI), Carl Mummert, and Michael Schroeder. For additional information, please see <u>http://www.marshall.edu/math/</u>reu or send email to mathreu@marshall.edu.



still time for you to submit an abstract to give a talk. You can find more information about the meeting at the MAA website where you will discover that Judy Holdener, from Kenyon College, will present an Invited Address titled "Immersion in Mathematics via Digital Art."

The MAA, both at the national level and section level, is able to survive because of work done by an army of volunteer members. MAA Secretary, Barbara Faires, reminded us that she would like to have suggestions for appointments to national committees by April 1 (no foolin'!) if possible. If you are interested in serving or know of any good candidates, please let me know as soon as possible.

The MAA asks each governor to serve on an MAA committee. This helps with communication between the Board and committees and governors get a better idea of the work of the MAA. In Seattle, I began a three year term as a member of the MAA Committee on Departmental Review. This committee offers resources. including recommendations to mathematical sciences departments for external consultants to participate in self -study and program review processes. At the MAA website. vou will find pdf versions of the Committee's Guidelines for Undertaking a Self-Study in the Mathematical Sciences and its Guidelines for Serving as a Consultant in the Mathematical Sciences. If your department is planning a self-study this would be a good place to start.

Hope to see you at the Spring Ohio Section Meeting at Ohio Northern University. Be ready to celebrate the Ohio Section's 100th birthday!

Bill Higgins Wittenberg University (on leave at California Lutheran Univ.) Ohio Section Governor

President Reflects on the Need for MAA Sections

It's really not about the mathematics, or even the teaching, is it?

Yes, it's a provocative question to lead with, but it is a serious one, I assure you. I contend that the reason we've had a vibrant and active Ohio Section organization for 100 years now has never really been to provide us, its members, opportunities to prattle on about this or that elegant proof of a theorem; or to learn another cool new classroom tip for wresting more precious seconds of attention from that student in the back row of our calculus class who is fingering his cellphone; or even to discover what are the next best curriculum ideas for the mathematics major of the twenty-first century. To be sure, I have looked to do each of these things in the course of many Ohio Section meetings or workshops over the years, and I suspect you have as well. But in the end, that proof, that classroom tip, that curriculum idea, was not what we were really after, not really why we had attended that Section meeting.



If you want to find that pleasantly clever proof, there are plenty of books out there to consult, books that our libraries now bring electronically right into our laps, without requiring us even to walk the few yards from our office to the library building. To locate that suggestion for what to do in the classroom there are countless blogs by master teachers who are generous with their expertise online. Is there still a need to take a precious Friday afternoon and Saturday morning out of one's calendar, to drive a few hours across the state to some strange campus and sit through hour-long addresses and 15-minute talks, or to stand around tables of publishers' wares with a cup of coffee and a cookie or two in hand to learn the same thing we could learn from the comfort of our office? Indeed, the national MAA organization already supports all these electronic resources. It provides a rich web presence at maa.org, respected print and electronic journals, and a vast library of other publications to support virtually anything that teachers of college-level mathematics would be interested in. Face it: none of this requires a Section organization to serve us. So why do we have one?

My answer to this question is simple: it's really about the people. That is, yes, it certainly is about the mathematics, but there's something rather soulless about enjoying mathematics alone. Very few of us have become mathematicians in the absence of other mathematicians to instruct us, challenge us, guide us, and pose us new questions. And yes, it is about quality teaching. But quality teaching is impossible to realize without students with whom to engage, students with even a modicum of curiosity about our subject. Becoming a good teacher doesn't happen without having had one's own experience as a student of being taught by a good teacher, or of being coached as an apprentice by other expert teachers. And maintaining quality in our teaching requires ongoing discussions with other good teachers; otherwise, we so quickly grow stale creatively.

And even though we all come from universities and colleges of our own, we know that it's often surprisingly difficult to find like-minded mathematicians and teachers at our home institutions with whom to share experiences that excite and challenge us as mathematicians – as students and teachers alike – person to person.

This struck me fully when I began reading the new book *I, Mathematician*, by Peter Cassaza, Steve Krantz, and Randi D. Ruden (MAA, 2015), and came across the following brief manifesto from the authors in its preface:

Nothing measures up to the discovery and establishing of a new mathematical truth, and there is no joy like communicating those truths to our students and colleagues. Nothing has the timelessness, the enduring value, the pure pleasure of mathematical learning and discovery and teaching. This is what we are about.

Friends, that's it. Our Ohio Section (in fact, any MAA Section) is about the people. Because they are local organizations, Sections give us the ability to interact regularly, conveniently, and in person with people who deal with the (Continued on page 5)

Leo J. Schneider Scholarship to be Established at John Carroll

The family and friends of **Dr. Leo Joseph Schneider** are creating a perpetually endowed scholarship at John Carroll University in his name. Susan Schneider is establishing this endowed award as a lasting memorial to her husband. As a member of the John Carroll University Department of Mathematics from 1963 to 2010, Dr. Schneider taught innumerable students, challenging many to delve into mathematical problems beyond their coursework. Leo was an active member of the MAA, being MAA American Mathematics Competitions Chair from 1987-94, serving as President of the Ohio Section in 1997-98, and as Governor of the Ohio Section from 2000 until 2003. He served on the Program Committee from 1993 to 1996, and chaired the committee in 1995-

President's Message

(Continued from page 4)

same problems and experiences we all deal with in the college mathematics classroom. This is what animated Section meetings for the last 100 years, and encouraged our predecessors beginning in 1969 to increase the regularity of Ohio Section meetings from one every spring to one each fall and spring: there was always plenty of stuff to fill the program of a meeting on topics of concern to college level mathematics and its teaching and to keep us all engaged. We build our professional networks this way, nurture each other's careers this way, and make professional friendships this way.

You can read about this and more in our Centennial History of the Ohio Section, copies of which should be available to all paying registrants at the coming Spring 2016 meeting at ONU. You will find in its pages a number of short articles about people who were instrumental in the development of our Section over its history. There are too many to list in full, but they include: W.D. Cairns (Oberlin College), who may have been responsible for the organizational meeting in Columbus at which the MAA came into being, and who later served as our Section Chairman in 1931-32; Reginald B. Allen (Kenyon College), the Section's very first Chairman; Harriet Glazier, who taught at Western College for Women at Oxford from 1905 to 1920; Foster Brooks (Kent State University), who was Section Secretary-Treasurer for 25 years until 1972; Leo Schneider (John Carroll University), only recently deceased and still much missed, who served as Section President and as Governor, and who won the Section Award for Distinguished College or University Teaching in 2004; and many, many others. Speaking of people instrumental to the development of the Section, I

96. In 2004, he received the Ohio Section's Award for Distinguished College or University Teaching.

The income from the endowment will be utilized to provide awards to students to promote participation in undergraduate research in mathematics. The award recipients will be chosen yearly by a committee in the Department of Mathematics and Computer Science. Contributions may be sent to the Leo J. Schneider Math Scholarship Fund: Development Office, John Carroll University, 1 John Carroll Boulevard, University Heights, OH 44118 or given online at <u>www.jcu.edu/give</u> putting a dollar amount in "Other" and listing Leo J. Schneider Memorial Scholarship in "Comments".

must thank our Centennial Committee, whose duties are now coming to a close in the next few weeks, for helping to produce this History and for making our celebration of this milestone so enjoyable over the last several years. Even though I myself served on the committee as the Section Archivist and, as part of the committee's activities, set up a couple of Archive Dive, Live events at Section meetings, there is plenty of thanks to go around to the other members as well: David Kullman, the committee Chair, ably marshaled our forces, was responsible for the regular Centennial Minutes that punctuated our meetings' programs for the last seven years, and, with Fred Rickey, revised the text of the History. Tom Hern was responsible for the assembly and production of the final printed copies. Tom Dence made available those commemorative tchotchkes (bookmarks, carabiners, specially-printed M&Ms, windshield scrapers, etc.!) at recent meetings. And AI Stickney coordinated the project of involving many of you Section members in the writing of the histories of your own mathematics departments. Well done, gentlemen.

So, it may sound simplistic and trite, but it's also quite true: the Ohio Section exists for people who love to come together and celebrate their passions for teaching college-level students and helping their students to learn college-level mathematics, and it will prosper into its second century by continuing to serve us this way. Members, support, treasure, and celebrate our Ohio Section.

Happy 100th, everyone!

Danny Otero Xavier University Ohio Section President

Michael Schroeder Nominated For Program Committee

The Nominating Committee is pleased to nominate Michael Shroeder for the Program Committee. He received his Ph.D. from the University of Wisconsin - Madison in 2011, joined the faculty at Marshall University that year, and is now finishing his fifth year (and going up for



tenure in the fall!). Michael has participated in Ohio NExT since arriving in West Virginia -- which is proudly in the Ohio section -- and served as local arrangements chair for the Spring 2015 meeting at Marshall. His research area is combinatorics and graph theory, and recent work has been on classifying the completion of certain infinite families of latin squares. He is part of a recently awarded combinatorics REU grant for the summers of 2016 and 2017 and also is a participant in PIC Math, an MAA-sponsored program geared toward engaging math majors in research problems coming directly from industry.

Innovations in Teaching & Learning Conference in June

Franklin University's International Institute for Innovative Instruction is pleased to host and organize our annual conference, Innovations in Teaching & Learning (formerly the Teaching & Learning in Higher Education Conference) on June 9 and 10, 2016. The title and theme invite a broad range of forward-thinking research and perspectives on higher education in the current global landscape. The event will be organized into four tracks that encompass the innovative thinking the conference intends to foster:

□ Challenging the Status Quo: Preparing Tomorrow's Leaders through Innovative Education

□ Emerging Technologies in Teaching, Learning, and Assessment

□ Assessment in Higher Education: What's Working, What's Not, and Why?

International Perspectives on Teaching and Learning

The two-day conference will be held on Franklin University's main campus in downtown Columbus, Ohio on June 9 and 10, 2016. More information about the conference can be found at <u>http://engage.franklin.edu/</u>te/itlconference/.

Ohio NExT Continues to Encourage New Faculty in the Section

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, April 7th, the night preceding the Ohio Section Spring Meeting, members of Ohio NExT will gather for a banquet beginning at 7:00 p.m. in the Wishing Well dining room of the McIntosh Center on the campus of Ohio Northern University. 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, April 8th, the Ohio NExT program will continue in Room 239 of the Mathile Center on the Ohio Northern University campus. The program will feature two workshops, as well as contributed talks by Ohio NExTers. We are pleased to announce that Dan Baczkowski of the University of Findlay will lead a workshop entitled "What Do Students Want?" and Fred Rickey, Professor Emeritus of the United States Military Academy, will lead the 2nd workshop on using history to teach courses and engage students. At last fall's meeting, the NExT workshop at Capital University featured Mark Miller of Marietta College and Scott Randby of the University of Akron for the fifty-minute workshops. David White of Denison University and Matt Davis of Muskingum University presented 15-minute talks.

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 Chris Swanson (cswanson@ashland.edu) for membership information and details. Ohio NExT is coordinated by Katie Cerrone, University of Akron (kc24@uakron.edu), Chandra Dinavahi of the University of Findlay (dinavahi@findlay.edu) and Chris Swanson, Ashland University (cswanson@ashland.edu).

"Gottfried Wilhelm Leibniz (1646-1716): `an academy in himself' "

The name Leibniz is instantly recognized as belonging to one of the great mathematicians of history, the man who (independently with Isaac Newton) formulated the basics of the differential and integral calculus. One of several lights of the European Enlightenment, Leibniz lived in an era in which it was possible to know something

 $\int f(x) dx$



 $d(x^n) = nx^{n-1}dx$

about "everything" -- and he did! Some decades after his death, Frederick the Great, the philosopher king, described Leibniz as "an academy in himself".

Leibniz made contributions to ethical and political philosophy, biology and medicine, history and linguistics, and many other fields. This talk, composed to mark the 300th anniversary of his death, will tell briefly of the life of Leibniz the polymath, and touch on a number of his mathematical accomplishments.

Danny Otero, Xavier University

Daniel E. Otero is an Associate Professor at Xavier University in Cincinnati, and is currently chair of the Department of Mathematics. He earned his Ph.D. at Penn State University in 1987, where he trained as a number theorist and algebraist. Most of his career has been at Xavier, where he turned his scholarship towards the history of mathematics and its use in teaching mathematics to undergraduates. In addition to serving as President of the MAA Ohio Section and its Archivist, he is Past Chair of the History of Mathematics SIGMAA, and serves on the editorial boards of MAA's online journal *Convergence* and the Spectrum book series.

His most thrilling work at the moment is his involvement in an NSF-sponsored grant project that will design, create, test, evaluate, and disseminate dozens of classroom modules for instructors to use to teach standard topics in the college mathematics curriculum by reading from primary historical sources.

Danny is an NPR news junkie, has deep eclectic tastes in music, loves playing bridge, and was a surprisingly young-looking grandfather of three until he became the department chair.

"Problems in Number Theory Involving Age-old Sequences"

Number theory involves studying general properties of the integers and prime numbers. Centuries ago, mathematicians were fascinated with prime numbers, triangular numbers, pentagonal numbers, and hexagonal numbers. By the nineteenth century, a great interest and progress in the distribution of prime numbers evolved. More recently, number theory properties have applications to modern day encryptions. In 1960, Sierpiński found connections between work of Erdös and sequences of composite integers. Most recently, some work with undergraduate student collaborators resulted in finding connections between Sierpinski numbers and these age-old sequences mentioned. We will discuss some recent results and the number theoretic tools used in solving such problems.



Dan Baczkowski, University of Findlay

Dan Baczkowski studied at Kent State University, Miami University, and the University of South Carolina. During his time in the South, he adopted the casual friendliness ubiquitous there and now says "Hello" to everyone he passes. He has a beautiful and talented wife; an adorable son, whose first word was "Dada"; and a daughter who continuously smiles and laughs. He loves teaching and makes it a priority to improve his class-room technique at every opportunity. He is enthralled with the beauty of his subject, mathematics, and passionately shares this with his students. His research involves number theory related ideas, and his students all agree that math is their favorite subject. He enjoys being outside and has become an avid tea drinker.

"Benjamin Franklin Finkel: The Man on the Ball"

We are gathered tonight to celebrate the centenary of the Mathematical Association of America. It was founded as a home for the American Mathematical Monthly which was founded by Finkel and started publication in 1894. We are here in Ada because Finkel earned his undergraduate degree here at Ohio Northern University. We will discuss Finkel's life, education, long involvement with the Monthly, and his impact on American Mathematics.

V. Frederick Rickey, a logician turned historian, retired in July 2011 because he could not get any work done while working. Now he is so busy with historical research that he still can't get everything done. With two colleagues he is preparing a volume on the cyphering books that George Washington compiled as a teenager. They contain decimal arithmetic, geometry, trigonometry of and logarithms, and lots surveying. After copy editing the new edition of the Correspondence

Fred Rickey, West Point



of Leonhard Euler with Christian Goldbach (Birkhauser 2015) he has become interested in Euler's work on Number Theory.

After earning three degrees from the University of Notre Dame (Ph.D. 1968) he went to Bowling Green State University where he rose through the professorial ranks to become a Distinguished Teaching Professor Emeritus (and where the students never called him "Sir"). In 1993 he received one of the first MAA Haimo Awards for Distinguished College or University Teaching of Mathematics. He "retired" in 1998 and joined the faculty at West Point (where the cadets called him "Sir" far too often).

He has been on leave six times, including as Visiting Mathematician at the MAA Headquarters. While there he was involved in the founding of Math Horizons, built its first gopher and web pages, and wrote a successful NSF grant for an Institute for the History of Mathematics Use and lts in Teaching (IHMT).

He has broad interests in the history of mathematics and is especially interested in the development of the calculus. He loves teaching and enjoys giving lectures to mathematicians about the history of their field (something he continues to do in retirement).

Registration Information for April 8 - 9 Conference

Online registration is preferred. You may visit the Section web site at <u>http://www.maa.org/Ohio</u> for one-stop registration, banquet reservation, and abstract submission. The deadline for meeting pre-registration with banquet reservations is April 1. Abstracts for contributed papers must be submitted by March 25.

On-site meeting registration is always available, but last-minute banquet tickets cannot be guaranteed. Early registration helps with meeting arrangements and is always appreciated. On-site registration and packet pickup will begin 12:00 p.m. Friday at the Faculty & Staff Lounge, MT200, in the Mathile Center and will continue 8:00 a.m. Saturday.

Meeting participants who cannot register online may register by mail by sending: name, affiliation, address, phone, e -mail address (if any), type of position, and banquet buffet reservation. Registration by mail will be pending receipt of registration fees. 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), optional banquet fee (\$19 or \$15 per person)] to: Ohio Section MAA Meeting c/o Mihai Caragiu

Department of Mathematics and Statistics Ohio Northern University 525 S. Main St Ada, OH 45810.



Top Secret: Women's Contributions to the History of Computing

Did you know that the first "computers" were humans, not machines? Did you know that these "computers" were women, not men? Did you know that these women were in their late teens and early 20's - not PhD's? Come learn about the central role that women and mathematics played in the early development of computing, including the significant contributions of a group of young women, called the "Top Secret Rosies", during the transition to the computer era in World War II.



Jenna Carpenter, First Vice President of the National MAA

Dr. Jenna P. Carpenter is the Founding Dean and Professor of Engineering at Campbell University. Prior to that, she served for 26 years at Louisiana Tech University, as Associate Dean, Department Head and Director of the Office for Women in Science and Engineering. She is the 2015-2016 WEPAN Immediate Past President. Dr. Carpenter was Principal Investigator of Louisiana Tech's National Science Foundation (NSF) AD-VANCE grant, which sought to create a culture of success for women faculty in engineering and science, and previously served as co-Principal Investigator on the NSF-funded Women in Engineering ProActive Network (WEPAN) Knowledge Center Project, which created an online database/professional community focused on

Mentoring Women and Underrepresented Minorities in Mathematics

While mathematics fares better than some STEM (science, technology, engineering, mathematics) fields in attracting women and underrepresented minorities, there are still many issues which can negatively affect their success. Research has repeatedly shown that a diverse community of learners and scholars benefits everyone. So what can the mathematical community do to improve our recruiting and retention of these students? This talk will review some of the common roadblocks, look at what research says about those roadblocks, and present some practical strategies for addressing them which will help all students be more successful in their pursuit of mathematics.

women in engineering and science. She also served as Vice President for Professional Interest Councils on the Board of Directors for the American Society for Engineering Education (ASEE), as Director-at-Large for the ASEE Women in Engineering Division and as First Vice -President of the Mathematical Association of America. Dr. Carpenter currently advises on diversity and mentoring programs for a variety of NSF-funded programs and women-serving engineering and science organizations. She is an ABET Program Evaluator, Co-Chair of the Joint Committee on Women, Chair of the MAA Council on the Profession, and Chair of the Steering Committee for the National Academy of Engineering Grand Challenge Scholars Program.

Franklin has Two Programs Interacting with the High School Community

AT&T, Franklin University and central Ohio area high school students concluded the CBusStudentHack Coding for Community: Health and Wellness - a 12-week computer programming contest. The CBusStudentHack provided Columbus area high school students 21st century skills via computer science education, helped the students prepare for college and career readiness, and opened the doors of opportunity and creativity by offering them a chance to solve real world problems. Throughout the 12-week contest students learned how to navigate and create apps using Microsoft Touch Develop. The winning apps were focused on improving health and wellness and were judged on software quality, the potential impact on the central Ohio region, execution and creativity.

Franklin University, one of the leading educators of working adults in central Ohio, has been awarded a grant in the amount of \$885,000 from the Ohio Department of Education and Department of Higher Education. The grant, the largest awarded, was announced in December and provides funding to help high school faculty in Ohio receive the qualifications required to teach College Credit Plus courses, a statewide program that allows seventh-through-12th grade students to earn high school and college credit at the same time.

Leo Schneider Student Mathematical Competition

Undergraduate students from institutions of the Ohio section are invited to participate in the fifth 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 Ryan Rahrig at <u>r-rahrig@onu.edu</u>.

Talks by Students

Undergraduates and 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 a 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. One speaker per session is greatly preferred, but two speakers in one session can be accommodated if necessary. Each student speaker will receive a certificate acknowledging their 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 14 for submission information. Speakers are encouraged to check out "Technically Speaking," funded by the NSF and hosted by Denison University, at <u>http://</u> <u>techspeaking.denison.edu/</u> for tips and strategies for giving good math and science presentations.

Student Pizza Party

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

Try your hand at this problem from the 2015 Leo Schneider Student Mathematics Competition.

Solutions are available at the CONSTUM website, http://constum.ohiomaa.org/.

Problem 3: Tom and Jerry decide today that they will not pick on each other on the n^{th} day if $a_n = -1$ where $a_1 = 1$, $a_2 = 1$, $a_3 = -1$, and a_n for n > 3 is inductively given by $a_n = a_{n-1} a_{n-3}$. Will they pick on each other on the 1776th day? Prove your answer.

KME Convention at ONU

The national mathematics honor society Kappa Mu Epsilon (KME) will hold a Great Lakes Regional Convention in conjunction with the Mathematical Association of America (MAA) Ohio Section meeting.

KME was founded in 1931 in Oklahoma and today includes more than 150 chapters across the country, including six in the state of Ohio. Bowling Green State University was the first chapter and installed as Ohio Alpha in 1937, and Capital University is the latest chapter to be installed as Ohio Theta in 2015. The other KME chapters in Ohio include Ohio Gamma (1947) at Baldwin-Wallace College, Ohio Epsilon (1960) at Marietta College, and Ohio Zeta (1969) at Muskingum College.

Ohio Northern University serves as the host for the KME Convention along with MAA Section meeting as the Ohio Eta chapter of KME, installed in 1987. Ryan Rahrig, Assistant Professor of Statistics at ONU, is helping to coordinate the KME involvement as he is both the corresponding secretary of the Ohio Eta chapter and on the Executive Committee of the Ohio MAA Section. KME students and faculty will participate fully in the MAA Section meeting and KME chapters will all gather once during the two-day meeting.

Spring Meeting Program

Friday, April 8				Saturday, April 9			
12:00-4:00	Registration	MT200 Mathile Center		8:00-10:00	Registration	Faculty & Staff Lounge MT200 Mathile Cent.	
12.00-1.20	Team Competition	McIntosh Center		8:00-10:00	Book Vendors and Exhibits	MT206 A&B Mathile Cent.	
12:00-1:00	Committee Meetings:			8:00-9:15	Coffee and Pastries	MT206 A&B	
	Centennial Committee	202 McIntosh				Mathile Cent.	
	CONCUR (Curriculum) CONSACT (Section Activities)	203 McIntosh 204 McIntosh	-	8:50-9:25	Arrangements	& Stat Conference Room	
	CONTEAL (Teacher Education & Licensure)	205 McIntosh		0.25 0.25	Walaama and	Mathile Cent.	
1:00-4:00	Vendor & Book Exhibits	MT206 A&B Mathile Cent.		9:25-9:35	Announcements	HP 151 Hakes Pierstorf	
1:30-1:45	Welcome and Announcements	HP151 Hakes Pierstorf		9:35-10:35	Invited Address: "Top Secret: Women's	HP151 Hakes Biorstorf	
1:45-2:45	Retiring President's Address: "Gottfried Wilhelm Leibniz (1646- 1716): 'an academy in himself'"	HP151 Hakes Pierstorf			Contributions to the History of Computing" Jenna Carpenter	FIEISION	
	Danny Otero			10:35-10:50	Break	MT206 A&B Mathile Cent	
2:45-3:05	Break	MT206 A&B Mathile Cent.		10:50-11:50	Contributed Paper Session	2 nd Floor Mathile Cent.	
3:05-3:15	Centennial Minute	HP151 Hakes Pierstorf		12:00-1:00	Invited Address:	HP151	
3:15-4:15	Invited Address: "Problems in Number Theory Involving Age-old Sequences" Dan Baczkowsli	HP151 Hakes Pierstorf			"Mentoring Women and Underrepresented Minorities in Mathematics" Jenna Carpenter	Hakes Pierstorf	
4:15-5:50	Executive Committee Meeting	MT239 Mathile Cent.		1:00-1:10	Closing Remarks	HP151 Hakes	
4:30-6:25	Contributed Paper Session	2 nd Floor Mathile Cent.				Pierstorf	
6:25-6:45	Social Time	Ballroom, McIntosh		Event locations are subject to change. Check the official program you receive when you register for the meeting in the Faculty & Staff Lounge of the Mathile Center. Also, check the Section web page, www.maa.org/Ohio, for program updates, online registration, and contributed paper submissions.			
6:30-8:00	Banquet	Ballroom, McIntosh					
6:45-8:00	Student Pizza Party	Activities Rm McIntosh					
8:10-9:10	After dinner talk: " Benjamin Franklin Finkel: The Man on the Ball " Fred Rickey	Ballroom, McIntosh		Once again there is a discount for purchasing books at the MAA Store. The section discount code is OHSPRG16 . This offer is for 35% off books and			
9:10	Business Meeting	Ballroom, McIntosh		Is valid from April 4 - 17.			

Hotel Information

ALL AVAILABLE GROUP BLOCKED ROOMS/RATES ARE ONLY HELD UNITL 3/8/2016

1. The Inn at Ohio Northern University (On-site) 401 West College Avenue Ada, Ohio 419-772-2500 533-713-4513 Single Occupancy Rate: \$99.00 (subject to tax) (Additional Guest \$10.00 each) Check In Date: 4/8/2016 Check Out Date: 4/9/2016 Location: On Campus

2. Holiday Inn Express & Suites (Findlay) 941 Interstate Drive Findlay, OH 45840 419-420-1776 Single Occupancy Rate: \$119.00 (subject to tax) (Additional Guest \$10.00 each) Check In Date: 4/8/2016 Check Out Date: 4/9/2016 Location: 24 miles from ONU

ALL INNS LISTED USE ROOM BLOCK GROUP NAME: MAA-OHIO SECTION SPRING MEETING

3. Hampton Inn (Lima)
1933 Roschman Avenue
Lima, OH 45804
419-225-8300
Single Occupancy Rate: \$95.00 (subject to tax)
Check In Date: 4/8/2016
Check Out Date: 4/9/2016
Location: 16 miles from ONU

4. Comfort Inn (Bluffton) 117 Commerce Lane Bluffton, OH 45817 419-358-6000 Single Occupancy Rate: \$72.99 (subject to tax) (Cost includes 2 people and extra is \$15 ea) Check In Date: 4/8/2016 Check Out Date: 4/9/2016 Location: 12 miles from ONU

Driving Details

From Cincinnati, OH (2.5 hrs.) Dayton, OH (1.5 hrs.)

Take I-75 north to Lima Ohio; then State Route 81 east to State Route 235 south to Ada, Ohio.

From Columbus, OH (1.5 hrs.)

Take I-270 northwest to US 33 west to Marysville, Ohio; then state Route 31 to Kenton, Ohio; then state Route 309 west 13 miles to the intersection of state Route 235; then state Route 235 north to Ada, Ohio.

From East Cleveland (3 hrs.)

Take I- 271 south; then I-71 south to U.S. 30; then U.S. 30 west to state Route 235; then state Route 235 south to Ada, Ohio.

From West Cleveland (2.5 hrs.)

Take the turnpike, I-80, west to state Route 53 south exit, follow state Route 53 south to U.S. 6 west; then U.S. 6 west to I-75; then I-75 south to Mt. Cory/Ada exit; then state Route 235 south to Ada, Ohio.



About Ohio Northern University

Located in Ada, Ohio Northern University is a private, United Methodist Church-affiliated four-year institution established in 1871. It is ranked second by US News and World Report among the Midwest regional colleges. Its mission is to provide a high-quality learning environment that prepares students for success in their careers; service to their communities, the nation and the world; and a lifetime of personal growth inspired by the higher values of truth, beauty and goodness. The University's distinctive academic program includes mutually supporting liberal and professional education components that integrate practice with theory, complemented by excellent co-curricular offerings that enrich the Northern experience. To fulfill this mission, faculty and staff engage with students so they can learn to think critically, creatively and entrepreneurially; communicate effectively; gain practical experience; solve problems collaboratively; and act as ethical and responsible members of a global community.

Parking Information

The best place to park is in Lot P (next to the Pharmacy building). See the map below.



Campus Buildings:

- 1 Alumni House
- 2 **Biggs Engineering Building**
- **Burgett Pavilion** 3
- 4 **Business Services Building**
- Career Services-McIntosh Center 5
- Child Development Center 6
- 7 Clark Hall
- 8 **Commons Building**
- **Counseling Center** 9
- 10 Dial-Roberson Stadium
- 11 The Dicke House (President's Home)
- **Dukes Memorial** 12
- 13 Elzay Gallery of Art
- 14 English Chapel
- Freed Center for the Performing Arts 15 16 Hakes-Pierstorf Family Pharmacy Education Center, Alumni & Friends Entrance Plaza, Meijer Terrace
- Heterick Memorial Library 17
- 18 Hill Memorial
- The Inn at ONU 19
- James F. Dicke Hall 20 21
- Lehr Memorial
- Maintenance Facility 22
- 23 Mathile Center for the Natural Sciences

- 24 McIntosh Center
- 25 Meyer Hall of Science
- Multicultural Center-26
- Lehr Kennedy House
- 27 Northern on Main
- 28 Observatory
- 29 **ONU Sports Center/King Horn**
- 30 Physical Plant Grounds Dept. Physical Plant Offices 31
- Picnic Pavilion (Shelter House) 32
- Presser Hall 33
- Remington Walk 34
- 35 Robertson-Evans Pharmacy
 - Building
- 36 Science Annex
- 37 Student Health Center
- Taft Memorial 38
- Taggart Law Library 39
- 40 Tilton Hall of Law
- Weber Hall (Admissions/ 41
- Financial Aid) 42
- 43
 - & Tower

Student Housing:

- 44 5 University Parkway
- 45 Affinity Village
- Alpha Xi Delta 46
- 47 Brookhart Hall 48
 - Courtyard Apartments
- Delta Sigma Phi 49
- 50 Delta Zeta
- Founders Hall 51
 - Kappa Alpha Theta
 - Klondike's Den
- 53 54 Lakeview

52

- Lima Hall 55
- Maglott Hall 56
- 57 Northern Commons
- 58 Northern House
- 59 Park Hall
- 60 Phi Delta Chi
- 61 Polar Place
- 62 Roberts Hall

Stambaugh Hall

University Terrace

Zeta Tau Alpha

Theta Chi

- 63 Sigma Phi Epsilon Stadium View
- 64 Apartments 65

66

67

68

- Wilson Art Building
- WONB Radio Transmitter

- University Inn U
- Stadium View С University Place
- W Wander
- West Circle F

- J King Horn 📕 Α Lakeview
 - Lehr M Q
 - Lincoln Ν Main 🔳 🔳

Parking Lots:

5UP 🔳

Affinity

Biggs 🔳

Clark

Dicke 🔳

Dukes

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Bear East

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- McIntosh (Admissions D
- and Financial Aid Parking)

South zone

West zone

East zone

Commuters

Faculty and staff

Baker Commons

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- н Meyer West
- Pharmacy = Ρ
- G Raabe 📕

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Stadium S Stambaugh

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. 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 25. You may submit abstracts online at the Section web page: <u>http://sections.maa.org/ohio/.</u>

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, Bill Fuller, by e-mail at <u>w-fuller@onu.edu</u>, or by U.S. mail at Department of Mathematics and Statistics, Ohio Northern University, 525 S. Main St, Ada, OH 45810. Abstracts should be

Lunch Suggestions in Ada, OH in walking distance from ONU

- East of Chicago Pizza 430 S Main St
- El Campo Mexican Restaurant 204 N. Main Street
- Jalapeno's Mexican Grill 109 S. Main Street
- McDonalds
 - 132 S. Main Street
- New China Chinese Restaurant 218 N. Main Street
- Northern on Main
 534 S. Main Street
- Padrone's Pizza
 219 S. Main Street
- Subway 424 S. Main Street
- Taco Bell

530 Main Street

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. Speakers with specific questions about technology availability should contact Mihai Caragiu at <u>m-caragiu.1@onu.edu</u>.

MAA Ohio Section Spring Meeting Banquet Menu

Greek Salad

Lemon Parmesan Chicken with White Wine Chive Sauce Garlic Smashed New Potatoes Fresh Sautéed Green Beans with Shallots Rolls and Butter Death by Chocolate Truffle \$19.00

Vegetarian Option Greek Salad Portabella Mushroom Napoleon Garlic Smashed New Potatoes Fresh Sautéed Green Beans with Shallots Rolls and Butter Death by Chocolate Truffle \$15.00

News from Friends Across Ohio

Dr. JiYoon Jung has returned to Marshall University after one and a half years at the National Institute for Mathematical Sciences (NIMS) in Korea. She participated in two projects with the Mathematical Data-Analytics and its Applications Department: "Analysis on Graphs Structures and Its Applications" (studying the list coloring conjecture) and "Daejeon Bus Transit Route Network Design using Combinatorial Optimization". Two Baldwin Wallace University faculty are retiring this year, Drs. Teresa Graham and Tim Riggle. Also at Baldwin Wallace, Dr. Peggy Slavik recently earned a Ph.D. in Mathematics Education. Ed Gallo retired from Sinclair Community College at the end of the fall 2015 semester.

2014-2015 Ohio Section Officers and Committees

ELECTED OFFICERS

President

Daniel Otero, Xavier University 513-745-2012; otero@xavier.edu (2016)

Past-President

John Prather, Ohio University - Eastern 740-699-2498; prather@ohio.edu (2016)

President-Elect

Chris Swanson, Ashland University (2016) 419-289-5264; cswanson@ashland.edu

Section Governor

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

Secretary

Pamela Warton, University of Findlay 419-434-4147; warton@findlay.edu (2017)

Treasurer

Brian Shelburne, Wittenberg University 937-327-7862; bshelburne@wittenberg.edu (2108)

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 (2018) 419-783-2464; dstuckey@defiance.edu

Ohio Project NExT Co-Coordinators

Katie Cerrone Arnold, University of Akron 330-927-8809; kc24@uakron.edu Chris Swanson, Ashland University (2016) 419-289-5264; cswanson@ashland.edu Chandra Dinavahi, U. of Findlay 419-434-6598; dinavahi@findlay.edu

OhioMATYC Liaison to OhioMAA

Jim Anderson, University of Toledo

OCTM Liaison

Aaron Blodgett, University of Findlay

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.

CONTEAL

*Aaron Blodgett, Univ of Findlay (2017) Jenny McKinney, Shawnee State U. (2016) Sandy Schroeder, Ohio Northern U. (2016) Najat Baji, Sinclair Comm College (2017) Laurie Dunlap, University of Akron (2017) Susan Thompson, Otterbein University (2017)

CONSTUM

*Ryan Rahrig, Ohio Northern Univ (2016) Melissa Dennison, Baldwin Wallace U. (2016) Mohammed Zaki, Ohio Northern Univ (2016) Matthew McMullen, Otterbein Univ (2017)

CONSACT

*Paige Rinker, John Carroll University (2018) Lola Thompson, Oberlin College (2016) Kathryn Leed, Lorain Cty Comm Coll (2017) Flavia Sancier-Barbosa, Antioch Coll (2017)

CONCUR

*Chandra Dinavahi, U. of Findlay (2016) Glen Lobo, Sinclair Comm. College (2016) William Fuller, Ohio Northern Univ (2017) Syvillia Averett, Central State Univ (2017)

OTHER COMMITTEES

Program Committee

*Bill Fuller, Ohio Northern U. (2016) Laurie Dunlap, University of Akron (2017) Barbara Margolius, Cleveland State U. (2018)

Nominating Committee

* Phil Blau, Shawnee State Univ (2018) Wiebke Diestelkamp, Univ of Dayton (2017) Jon Stadler, Ashland University (2016)

Teaching Award Committee

* John Prather, Ohio University - Eastern (Past President) (2017) Pam Warton, University of Findlay (Secretary), Lew Ludwig, Denison University (2016) Chris Swanson, Ashland University (2017)

Centennial Committee

*David Kullman, Miami University (2016) Tom Dence, Ashland University Tom Hern, Bowling Green State University Danny Otero, Xavier University Al Stickney, Wittenberg University

LOCAL ARRANGEMENTS FOR MEETINGS

Spring 2016: Ohio Northern University Mihai Caragiu, m-caragiu.1@onu.edu

Fall 2016: College of Wooster Drew Pasteur, dpasteur@gmail.com

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/</u><u>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 13, 2016**. 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 2016 Section Meeting, April 8 - 9 Ohio Northern University, Ada, OH

Fall 2016 Section Meeting, October 28-29 College of Wooster, Wooster, Ohio

National MAA-AMS Meetings

Annual Joint Meetings, January 6-9, 2016, Seattle, WA

MathFest, August 3-6, 2016, Columbus, OH



Annual Joint Meetings, January 4-7, 2017, Atlanta, GA

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

Thank You to the many people who contributed articles and information for this newsletter. And a special thanks to the Centennial Committee for their efforts in promoting our celebration.

David Stuckey, Editor

Other Meetings: Ohio and Surrounding States

Indiana Section MAA Section Meeting, March 18-19, 2016, Franklin College, Franklin, IN http://sections.maa.org/indiana/

Kentucky Section MAA Section Meeting, April 1-2, 2016, Northern Kentucky University, Highland Heights, KY http://sections.maa.org/kentucky/index.shtml

Michigan Section MAA Section Meeting, April 1-2, 2016, Hillsdale College, Hillsdale, MI with MichMATYC http://sections.maa.org/michigan/ meetings/2016 Spring annual meeting.html

Allegheny Section MAA Section Meeting, April 1-2, 2016, Gannon University, Erie, PA http://sections.maa.org/allegheny/annual_meeting_2016/meeting2016.htm

OCTM Annual Meeting, October 15-16, 2016, Cincinnati, OH http://www.ohioctm.org/conferences/65th-annualconference-cincinnati

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

Other National Meetings

T³ International Conference, February 26-28, 2016,Orlando, FLinternational

International Conference on Technology in Collegiate Mathematics (ICTCM), March 10-13, 2016, Atlanta, GA <u>http://www.pearsonhighered.com/</u> <u>ictcm/</u>

NCTM National Meeting, April 13-16, 2016, San Francisco, CA

http://www.nctm.org/Conferences-and-Professional-Development/Annual-Meeting-and-Exposition/

IBL Workshops, June 21-24, and June 28-July1, 2016, Cal Poly, San Luis Obispo, CA <u>www.iblworkshop.org</u>

Joint Statistical Meetings, July 30-August 4, 2016, Chicago, IL <u>http://www.amstat.org/meetings/</u> jsm/2016/conferenceinfo.cfm#

AMATYC Annual Conference, Nov 17-20, 2016, Denver, CO <u>https://amatyc.site-ym.com/?</u> 2016ConfHome