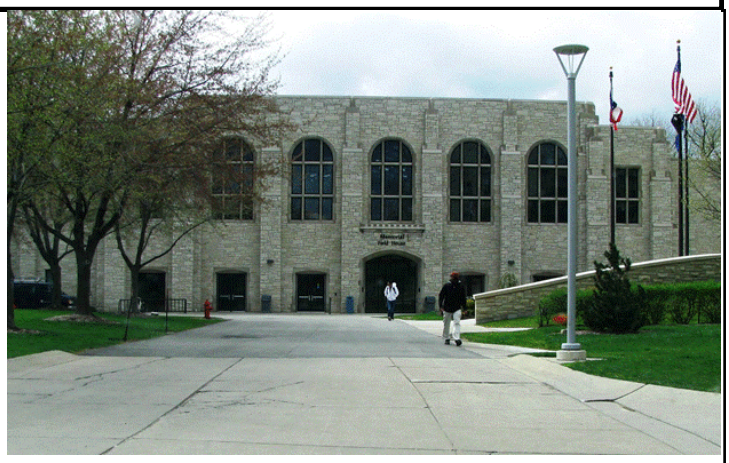
Ohio Focus

The MAA Ohio Section Newsletter

Volume 12 | Fall 2021 | Number 18.2

MAA Ohio Section Fall Meeting
Friday-Saturday October 15-16
University of Toledo



The Fall Meeting for the Ohio Section MAA will be held at the University of Toledo on the **Main Campus** in the Memorial Field House on Friday and Saturday. The registration table will be located on the east side of the Memorial Field House (pictured on the right) on the first floor.

The University of Toledo has three campuses with the Fall Meeting being held on the Main Campus. The northern boundary of the Main Campus is W Bancroft St, the southern boundary is Dorr St, the eastern boundary is Douglas Rd, and the western boundary is Secor Rd. All the information for the Fall Meeting can be found on the Local Arrangements webpage (http://math.utoledo.edu/~janders/OhioMAAFall2021Meeting/).

The banquet on Friday and the lunch before the workshop on Saturday will be held at Phoenicia Cuisine in the Lancelot Thompson Student Union.

Due to the continuing Covid-19 pandemic, the University of Toledo has instituted a mask mandate for indoors except for eating. Masks are not required outdoors.

Registration Information for Spring Meeting

Online registration is preferred. The Section web site at **www.maa.org/Ohio** for one-stop registration, banquet reservation, and abstract submission will be open after Wednesday September 1, 2021. The deadline for meeting pre-registration and banquet reservations is Saturday October 9, 2021. Abstracts for contributed papers must be submitted by Friday October 1, 2021 On-site meeting registration is always available, but last-minute banquet tickets cannot be guaranteed. Early registration helps those arranging the meeting and is always appreciated. Registration will be held beginning 12:00 p.m. on Friday at the East Entrance of the Field House and will continue Saturday morning at 8:00 a.m. .

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From Our President—David Stuckey

It is hardly a surprise, but it is worth noting that almost all our casual conversations revolve around the pandemic. Whether it be a personal account or discussing the changing situations at the local, state or national levels, any topic seems to include a consideration of COVID-19. It was woven into the planning for MathFest this year in multiple ways. There were contributed paper sessions set up for the topic, Insights into Quantitative Literacy and Reasoning from the COVID-19 Pandemic. One of the invited addresses was "A New Approach for Fighting Infectious Disease, Combining Game Theory and Graph Theory" by Po-Shen Loh. While his insights were applicable to many diseases, particularly ebola, all of the chat comments dealt with corona. At the Section Officers meeting, one of the breakout room discussions centered on how the sections had adjusted to the situation and what improvements we were keeping.

One clear strategy is to hold committee meetings virtually. We have been successfully holding the Executive Committee meetings via Zoom. This has been particularly useful for the summer meeting to cut down on lengthy travel for some members. It also will be beneficial when we gather for our Fall and Annual Meetings. Since we do not need to wait for the meeting in order to get all of us together, we will be free to participate during the contributed paper sessions. Likewise, those traveling in a group or with students will have more freedom in scheduling their plans.

Perhaps a stronger point is using this with our standing committees. Under this format, committees can meet as frequently as needed and for as long or short a time as necessary. There is no need to wait for a section meeting to conduct business. Hopefully, that will make committee membership more feasible for many members. If you would like to be involved in section activities or have questions about what is involved, please contact me and we can discuss this.

The Committee on Curriculum (CONCUR) maintains an ongoing study of undergraduate mathematics curriculum and related matters. It is currently chaired by Anup Lamichane. The Committee on Teacher Education and Licensure (CONTEAL) stays abreast of changes in K-12 math education and licensure requirements for these teachers. It is headed by Katie Cerrone Arnold. The Committee on Student Members (CONSTUM) coordinates any activities explicitly designed for students, including the Leo Schneider Student Team Competition. Matthew McMullen had managed this group well for several years. The Committee on Section Activities (CONSACT) organizes the Fall Workshop. Jim Anderson leads this committee.

Considering Jim Anderson, we should thank him for doing double duty this year, not only working on the details for the Fall Workshop with Jim Fowler, but also being the local arrangements director for the Fall Meeting in Toledo. We also want to thank Najat Baji for lining up a fine program. I hope to see as many of you as possible on October 15th and 16th. We each have our own unique set of circumstances guiding our decisions, but we certainly have learned to appreciate our times together as much as we can.

David Stuckey
Ohio Section President
Defiance College

From Our Section Representative—Phil Blau

I am excited to be giving my first report as your Section Representative!

While MathFest 2021 could not to be held in Sacramento as planned, the MAA was able to host it virtually. It was good that the membership did not have to wait another year for any sort of MathFest. I did find the virtual meeting valuable and hope those of you who attended did as well. MathFest 2022 is still scheduled to be held in Philadelphia, though clearly the last 18 months have shown us that plans can and do change. Prior to the meeting I was able to attend the meeting of the MAA Congress. Below are some highlights of that meeting.

There was some discussion about leveraging the technology used to deliver a virtual meeting. Most (if not all) of the Congress believe that essential things happen in a face-to-face meeting that cannot always be duplicated when a meeting delivered remotely. Members of the Congress did recognize that virtual meetings do increase the accessibility of the meeting by reducing the time and expense of traveling to and attending a national meeting. Should meetings be virtual? What about a hybrid meeting with some activities for those who are able to attend in-person (though several people spoke about hybrid being the "worst of both worlds"). What about a virtual component that would be separate and supplementary to an in-person meeting? An example of this, albeit on a much smaller scale, is that our section will continue to hold our executive committee meetings virtually as we (plan to) return to face-to-face meetings this fall. These are important issues that will be discussed in the future; the Ohio Section needs to give its input.

Diversity, inclusion, and equity was also discussed. Inclusivity is one of the core values of the MAA (the others are community, communication, and teaching and learning). Related to this, the MAA has started an effort to widen its membership, with an initial step to increase participation from three groups: Historically Black Universities and Colleges (HBUC), R1 research universities, and community colleges. As part of the "homework" for the Congress, we read portions of "Towards a Fully Inclusive Mathematics Profession," a report of an AMS task force issued in March. In reviewing the report, I noted that between 2001-09, HBUCs produced 46% of all African-Americans who received bachelor degrees in mathematics in the United States even though only 9% of African American college students are enrolled in these institutions. The initial discussion on widening membership noted this and talked about ways to get more involvement from HBUCs. As HBUCs, R1 research universities, and community colleges are all located within our section, we have an opportunity to contribute to this effort.

Another topic discussed was the MAA code of conduct, which was just approved in May. This important document is on the MAA website, and I encourage you to become familiar with it. Quoting from the document's statement of purpose we need to remember that it "is not enough for us to simply modify our own behavior and 'do our best' as individuals" but "we must pursue collective effort to speak against attitudes and behavior that continue to harm less-privileged members of our profession and our society." MAA President Jennifer Quinn noted the code of conduct is still a work in progress and sections may be further developed and modified in the future.

At the Congress, C. Allen Butler, MAA Treasurer, gave a report. He indicated that he felt the fiscal health of the MAA was as good as it has been in the two decades he has been familiar with the details of the MAA finances.

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Registration Information continued from page 1

Meeting participants who are unable to register online at **www.maa.org/Ohio** 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 ($45 ordinary registration, $20 retired or part-time, no fee for students or first-time attendees), banquet buffet fee ($20.00 per person)] to: Ohio Section MAA Fall Meeting, c/o Jim Anderson, 2273 Carriage Drive, Toledo, Ohio 43615-2722. Phone: 440-864-2336. Registration by e-mail will be pending receipt of registration fees.

Phil Blau continued from page 3

The MAA Instructional Practice (IP) Guide is still relatively new. Having departmental faculty review and discuss this detailed resource of effective, evidence-based practices is an opportunity to positively impact the teaching and learning of mathematics. The IP Guide, along with a Book Study Guide to help structure a reading group, are available in the Curriculum Resources section the MAA website. I hope to continue to become more familiar with these valuable resources.

Speaking of relatively new things, don't forget about MAA Connect (found under the Communities tab on the MAA website). This online community was created to help the membership connect, communicate, and collaborate. This platform is a great resource.

I hope I have given a sense of some of the activity of the MAA congress. I encourage you to read the 2020 Impact Report on the MAA website for a complete summary of the state of the MAA. You can contact me at pblau@shawnee.edu with any suggestions, questions, or things you would like me to bring to the attention of the congress

Announcement of Ohio Mathematics and Science Coalition (OMSC) Free Webinar

September 30, 2021 at 7:00 p.m.

Title: Not your parents' STEM class: The power of play and stories to revitalize STEM education.

The presenters are Drs. Theodore (Teddy) Chao and Christopher (Chris) Orban, both of whom are faculty members at Ohio State University. Dr. Chao is in mathematics education, and Dr. Orban is in physics, with a strong interest in computer science. Dr. Orban will focus primarily on the upper grades, and Dr. Chao will speak about the lower grades. Their thoughtful ideas about what students should learn and how they can best learn it should be of great interest to parents, grandparents, guardians, and teachers.

There was a young man from Trinity
Who took the square root of infinity
But too many figures
Gave him the jitters
So he dropped math and took up divinity

An anonymous classic:

$$\int_1^{\sqrt[3]{3}} z^2 dz \times \cos\frac{3\pi}{9} = \ln\sqrt[3]{e}$$

The integral *z*-squared *dz*
From one to the cube root of three
Times the cosine
Of three pi over nine
Equals log of the cube root of *e*.

Campus Notes

From Barbara D'Ambrosia at John Carroll University: We have a new department name: The Department of Mathematics, Computer Science, and Data Science.

In addition JCU welcomes Paromita Banerjee as a tenure-track assistant professor of Statistics, and Drew Duncan as a tenure-track assistant professor of Data Science Paromita completed her PhD in Applied Math at Case Western Reserve University in August 2020 and was in a visiting position at JCU last year.

Drew completed his PhD in Mathematics at University of Kentucky in August 2021. Finally, Kate Trapp's visiting position in mathematics has come to an end, but she has a continued presence at JCU

From Defiance College: David Stuckey has been selected for the Dr. Richard W. Stroede Distinguished Faculty Award. This honor, named for the professor, conductor, and academic dean who served the college for 40 years, is awarded by nomination of the faculty.

From Adam Parker at Wittenberg University: The Department of Math and Computer Science at Wittenberg is excited to welcome two new colleagues to the department. Dr. Jaimie Kelley joins us after completing her undergraduate degree at the "other" Ohio `berg, Heidelberg and her Ph.D. at Ohio State University. She is a tenure-track Assistant Professor teaching computer science courses. Shelby Cummings returns to her alma mater as a Professor of Practice in statistics. After graduating from Wittenberg in 2013, she earned masters' degrees in both statistics and public health from Texas A&M University. She will be teaching and coordinating many of our general education statistics offerings.

From Jim Anderson at University of Toledo:

Alessandro Arsie is the second recipient of the Provost's Faculty Mentoring Award. The award, which was first offered in 2020, recognizes significant contribution to faculty success through faculty mentoring.

Tian Chen has been awarded tenure and has been promoted to the rank of Associate Professor.

Funda Gultepe received an NSF LEAPS-MPS research grant from the Division of Mathematical Sciences of the NSF for the project ``Surface subgroups of outer automorphism group of the free group and dynamics on the boundary".

Trieu Le and Greg Lewis received the University's Outstanding Teacher Award.

Chunhua Shan received one of the 2021 Awards for Creative and Scholarly Activity for a highly cited journal article in the Journal of Differential Equations. He has been awarded tenure and has been promoted to the rank of Associate Professor.

Ekaterina Shemyakova has been awarded the Simons Foundation Collaboration Grant for Mathematicians. She has been awarded tenure and has been promoted to the rank of Associate Professor.

Gerard Thompson on his article in the Journal of Geometric Mechanics on "Invariant Metrics on Lie Groups" which has reached the top of the Journal's most downloaded list (435 PDF downloads, to date). Abstract: Index formulas for the curvature tensors of an invariant metric on a Lie group are obtained. The results are applied to the problem of characterizing invariant metrics of zero and non-zero constant curvature. Killing vector fields for such metrics are constructed and play an important role in the case of flat metrics.

Akaki Tikaradze received one of the 2021 Awards for Creative and Scholarly Activity for numerous high-quality articles in journals such as Advances in Mathematics and International Mathematics Research, among others.

Friday October 15th, 1:30 – 2:30 pm

Speaker: Matt Boelkins, Grand Valley State University

Title: Zoom Silver Linings: How COVID improved my teaching

Abstract: Prior to the global pandemic, I had a long-held teaching aspiration: never teach an online class. But after more than two full semesters of teaching some or all of my students in an online setting, I found that many aspects of my teaching practice were improved through changes necessitated by the modality. In this talk, we'll reflect together on what we learned teaching amidst COVID and consider Zoom-needed practices that we might/will/should carry into our in-person instruction.

Bio: Matt Boelkins is Professor of Mathematics at Grand Valley State University in Allendale, MI, where he has been a member of the faculty for almost 25 years. A passionate teacher and proponent of active learning, Professor Boelkins has been recognized with several teaching-related honors, including the Michigan Association of State Universities' 2016 Distinguished Professor of the Year. Throughout his career, he has worked to promote the scholarship of teaching and learning mathematics through scholarly papers, conference presentations, and the journal *PRIMUS* (Problems, Resources, and Issues in Mathematics Undergraduate Studies), which he serves as Editor-in-Chief. Professor Boelkins has co-authored several research papers with undergraduate students and is the author or co-author of four textbooks, including *Active Prelude to Calculus, Active Calculus Single Variable*, and *Active Calculus Multivariable*. As Director of New Student Advising & Registration at GVSU, he leads a large team of staff, faculty, and undergraduate student assistants that welcomes Grand Valley's incoming class of more than 4000 students annually. He is an active member of the MAA and a former first vice president of the Association.

Friday October 15th, 3:00 - 4:00 PM

Speaker: M.B. Rao—University of Cincinnati

Title: The Wonderful World of Simulations - A Tribute to Stanislaw Ulam

Abstract: Conducting simulations to solve many statistical and mathematical problems has become part and parcel of statistical education. The core ideas and development are attributed to Stanislaw Ulam and John von Neumann. In this presentation, ideas and development are traced historically culminating modern usage of Monte Carlo simulations in Bayesian Analysis, Bootstrap methods, and Genetics.

Marepalli Rao, PhD
Professor

Bio: MB Rao got his Ph.D. from the Indian Statistical Institute, Calcutta with thesis work on Measure Theory and Topology. His first job, right after graduation, was at the University of Sheffield, England as an Assistant Professor. He visited University of Pittsburgh for two years and then worked as an associate professor at the North Dakota State University. He joined University of Cincinnati in 2004 as a tenured professor in the Department of Environmental Health in the College of Medicine.
As per research, he considers himself as a jack of all trades. He has publications ranging from applied statistics to infinite dimensional probability, from matrix algebra to dynamical systems, and from Discrete Probability to Mathematical Puzzles. — *continued on page 7*

MB Rao Bio continued from page 6

He has published over 350 papers, authored three books, guided over 40 Ph.D. students, and 50 Master's students. He is an elected fellow of the Institute of Mathematical Statistics, American Statistical Association, International Statistical Institute, and American Association for the Advancement of Science. Currently, he is expending lots of energy on Data Science and conducting workshops on it around the globe. One is planned in Ethiopia in the Fall and another in Hyderabad next Spring. He is also working on a project with a cardiologist how to eavesdrop on the communications between the brain and heart.

Friday October 15th Banquet Talk, 8:00 – 9:00 pm

Speaker: Sarah Greenwald, Appalachian State University

Title: Geometry of the Earth and Universe

Abstract: The quest to understand the precise geometry and shape of our universe began thousands of years ago, when mathematicians and astronomers used mathematical models to try and explain their observations. We'll explore historical and current theories related to the geometry of the earth and universe.

Bio Sarah J. Greenwald, an MAA Polya Lecturer, is a professor in the Department of Mathematical Sciences and a faculty affiliate of Gender, Women's and Sexuality Studies in the Department of Interdisciplinary Studies at Appalachian State University. Greenwald earned a PhD in Riemannian geometry from the University of Pennsylvania and a BS in mathematics from Union College.

Investigating connections between mathematics and society, Greenwald has won awards for teaching, scholarship and service. These include an MAA Henry L. Alder Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member, an AWM Service Award, and College of Arts and Sciences Outstanding Teacher of the Year. As an AWM Fellow, Greenwald was cited for "creative and effective efforts to spark interest in mathematics among young people, especially girls… extensive contributions to advancing women in mathematics through writing, lectures and working with professional societies… and mentorship of students." Recent work includes *Fifty Years of Women in Mathematics: Reminiscences, History, and Visions for the Future of AWM*, an AWM-Springer book edited by Janet L. Beery, Greenwald, and Cathy Kessel, which is anticipated in early 2022.

Saturday October 16th Morning Talk, 9:35 – 10:35 am

Speaker: Sarah Greenwald, Appalachian State University

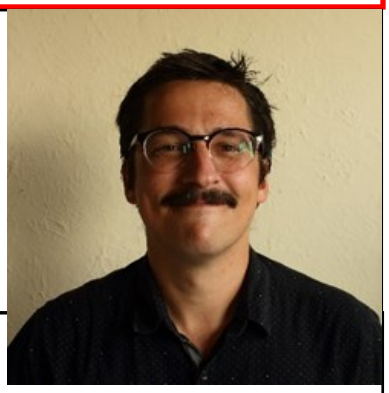
Title: How and Why the Association for Women in Mathematics was Founded and is Still Needed Today

Abstract: Founded 50 years ago, during a surge of feminist and civil rights activities, AWM is the oldest organization in the world devoted to women in mathematics. We'll look back at how and why AWM was formed and learn about why it's still vital in today's culture and the active role that it continues to play in the lives and work of girls and women.

Saturday October 16th, 12:00 – 1:00 pm

Speaker: Alexander Hoover, The University of Akron

Title: Swim, Pump, Fly: Modeling Propulsion in Fluid-Structure Interaction Systems



Abstract: For many organisms, swimming and flying emerges from the transfer of momentum from an animal's body to the local fluid environment. The complex kinematics that drive these processes emerge from the coupling between the active and passive material properties of a flexible body and the fluid environment in which they move. In this talk, we will discuss the role computational methods can play in examining a number of fluid-structure interaction systems. Importantly, we will focus on how the scientific process in this interdisciplinary field is aided by different pedagogical backgrounds.

Bio: Alexander Hoover (he/him) is an assistant professor of mathematics at the University of Akron, where he has been since Fall 2018. Prior to Akron, he completed his PhD at the University of North Carolina - Chapel Hill and was a postdoctoral fellow at Tulane University. He is a Project NExT fellow (Silver '19) and a board member of Spectra, the Association for LGBTQ+ Mathematicians. His research is at the intersection of applied math, fluids, and biology, and is happiest when out at sea looking at marine organisms for inspiration for the next math model.

Call for Presenters for Contributed Paper Sessions

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 Fall 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, October 1, 2021.

Online submission with your meeting registration (at http://sections.maa.org/ohio/) is strongly preferred, but if necessary, you may submit your title and abstract to the chair of the Program Committee, Najat Baji, by e-mail at najat.baji@sinclair.edu or by U.S. mail at

Najat Baji

Sinclair Community College

Dept. of Mathematics

444 West Third St.

Dayton, OH 45402-1460

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 another graphics code.

All the rooms have a computer with easy hookup for a laptop, a projector, and a 3-D overhead projector.

Ohio MAA Section NExT

Ohio MAA Section 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 MAA Section.

Please note that the Ohio NExT schedule has changed significantly in the recent past. If you have attended previously then you will want to pay particular attention to the new schedule. We hope that this new schedule will fit better with attendees' travel plans.

The Ohio NeXT program will take place on Saturday, October 16th , following the Ohio Section Fall meeting in FH 2100, on the campus of University of Toledo. The program will begin with lunch held at Phoencia Cuisine on the University of Toledo campus followed by workshop given by Dr. Jim Fowler (Ohio State University). Two contributed talks from Ohio NExTers will also be part of the program. Please consider giving a 15-minute contributed talk by emailing the title and abstract to Michael Schroeder (schroederm@marshall.edu).

The Ohio NExT program is free to Ohio NExT fellows. 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 fall or next spring. Contact Chandra Dinavahi (dinavahi@findlay.edu) for membership information and details.

Ohio NExT is coordinated by committee members Chandra Dinavahi of the University of Findlay (dinavahi@findlay.edu), Michael Schroeder from Marshall University (schroederm@marshall.edu) and Elizabeth Haynes-Wiget from Wilmington College(elizabeth_haynes-wiget@wilmington.edu).

Nominations sought for the Ohio Section Award for Distinguished College or University Teaching of Mathematics

There are many outstanding mathematics educators in the Ohio Section. If you know of such an excellent educator, please consider nominating him or her for the Ohio Section Award for Distinguished College or University Teaching of Mathematics.

To make a nomination, complete the one-page nomination form, write a description of why you have chosen to nominate this individual, and solicit recommendations from colleagues and current or former students. Nomination forms and detailed instructions are available from the Ohio MAA Website at http://sections.maa.org/ohio/Award/. Nominees must be members of the MAA and the Ohio Section, and they must have more than seven years of teaching experience in the mathematical sciences at the college/university level.

The award will be presented at the 2022 Spring Meeting of the Ohio Section and appropriate publicity will be generated at the winner's home institution. The winner will be considered for the Ohio Section's nominee for the MAA's 2022 Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics. Past Ohio Section winners who have gone on to receive the Haimo Award are Aparna Higgins (University of Dayton, 2005) and V. Frederick Rickey (Bowling Green State University, 1993).

Nominations should be sent to Kyle Calderhead, Secretary of the Ohio Section of the MAA, via e-mail to kcalderhead@malone.edu (preferred) or via postal mail to: Kyle Calderhead, Malone University/School of Business & Technology, 2600 Cleveland Ave NW, Canton OH 44709

DRIVING INFORMATION

If you want to use your GPS device, the address for the Main Campus of the University is 2801 W Bancroft St, Toledo, OH 43606.

NOTE: Route 2 is Airport Hwy, Route 20 running North-South is Reynolds Rd in Toledo, Route 20 running North-South is Conant St in Maumee, Route 20 running East-West is Central Ave, Route 51 is Monroe St, and Route 246 is Dorr St.

NOTE: The northern boundary of the Main Campus is W Bancroft St, the southern boundary is Dorr St, the eastern boundary is Douglas Rd, and the western boundary is Secor Rd.

From the Ohio Turnpike (Exit 59):
- Follow U.S. 20 (S. Reynolds Road) north to West Bancroft Street.
- Turn right onto West Bancroft Street.
- Proceed east on West Bancroft Street past Secor Road.

From the Ohio Turnpike (Exit 64):
- Follow I-75 north to I-475 (Exit 204).
- Travel west on I-475 to the fourth exit, Secor Road (Exit 17).
- Turn left onto Secor Road.
- Proceed south on Secor Road to West Bancroft Street.
- Turn left onto West Bancroft Street.

Via I-75 from the North:
- Continue south on I-75 to I-475 (Exit 204).
- Travel west on I-475 to the fourth exit, Secor Road (Exit 17).
- Turn left onto Secor Road.
- Proceed south on Secor Road to West Bancroft Street.
- Turn left onto West Bancroft Street.

Via I-75 from the South:
- Continue northbound on I-75 past downtown Toledo to I-475 west (Exit 204, Ann Arbor/Sylvania)
  Note: Do not take the first I-475 US 23 North exit near Perrysburg.
- Travel west on I-475 to the fourth exit, Secor Road (Exit 17).
- Turn left onto Secor Road.
- Proceed south on Secor Road to West Bancroft Street.
- Turn left onto West Bancroft Street.

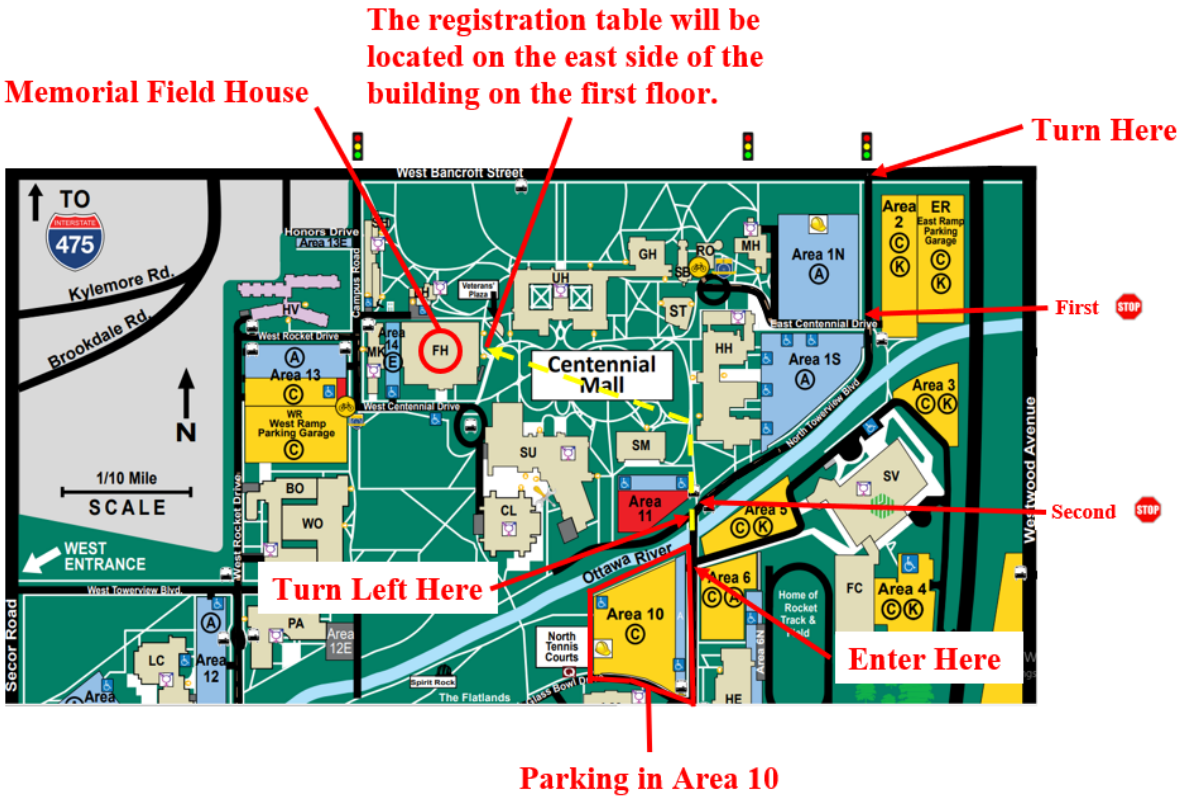
Via US 23 from the North:
- Continue south on U.S. 23 to I-475 east (Exit 232, bear left).
- Follow I-475 east to the second exit, Secor Road (Exit 17).
- Turn right onto Secor Road.
- Proceed south on Secor Road to West Bancroft Street.
- Turn left onto West Bancroft Street.

- To park in Area 10, proceed east on West Bancroft Street to the third traffic light east of Secor Road. At this traffic light, turn right onto North Towerview Blvd. After turning, you will want to be in the middle lane for going straight. Proceed to the **second** stop sign. Turn left onto Stadium Drive. After you cross the bridge over the Ottawa River, turn right into Area 10. **If you park in this area, you will NOT need to register your car and there is no charge for parking.**
- To park in other areas on campus, see **Parking Information** for directions to these areas. **These other parking areas will require you to register your car and will cost a total of $5.00 for both days.**

PARKING INFORMATION

Parking for the meeting are been arranged as follows. If you park in Area 10 (see below), you will **NOT** need to register your car and there is no charge for parking in this area. The parking is reserved for the meeting from 9:00 am to 10:00 pm on Friday and from 7:00 am to 5:00 pm on Saturday. You will need to park in a space marked with white lines except for handicapped parking. For handicapped parking, you will still need to display your handicapped placard.

If you want to park in any other parking area on campus, you **WILL** need to register your car and pay a total of $5.00 for both days. To register your car, a guest account must be created at the link above in order to purchase a guest permit. The guest permit is digital and there is nothing to display in your car. Payment for a guest permit may be made with a credit card, e-check, or e-savings. Parking Services is unable to refund guest permits; nor can they change the dates. Your guest permit will allow you to park in any parking area with signage displaying Permit C parking and you will need to park in a space marked with white lines. **Your guest permit will not allow you to park in a metered space. Metered parking is not recommended. Metered parking is intended for short term parking on campus.** If you need handicapped parking, you will need to indicate this when you register for the guest permit. Handicapped parking will allow you to park in any available handicapped space. You will still need to display your handicapped placard. When you register, if you choose a beginning date of October 15, 2021 and an ending date of October 16, 2021, your guest permit will be good from 12:00 am on October 15, 2021 to 11:59 pm on October 16, 2021 at a cost of $5.00. Link to a Tutorial for purchasing a permit.



Directions: Proceed east on West Bancroft Street to the third traffic light east of Secor Road. At this traffic light, turn right onto North Towerview Boulevard. After turning, you will want to be in the middle lane for going straight. Proceed to the **second** stop sign. Turn left onto Stadium Drive. After you cross the bridge over the Ottawa River, turn right into Area 10. **You will NOT need to register your car and there is no charge for parking in this area.**

HOTEL INFORMATION

All the rates are the University of Toledo rate for that hotel except for the Wingate which doesn't have the university rate. **You will need to mention this when you make your reservation.** The rates do not include the room tax. The room tax rate for Lucas County is 17.25%.

The addresses are for Toledo except for the Wingate, which is in Sylvania.

Clicking on the link for the Copy Plus Code will give you information for the hotel and a link for making reservations. However, you might want to call the hotel directly in order to make sure that you get the University of Toledo rate.

HOTEL	RATE	DISTANCE FROM CAMPUS	ADDRESS	PHONE NUMBER	COPY PLUS CODE	BREAK-FAST	CK IN/ OUT
Courtyard by Marriott Toledo West	$119	2.5 miles	3536 Secor Rd	419-724-0444	M9MH+RR	Hot	3:00 12:00
Hampton Inn & Suites Toledo/ Westgate	$114	2.5 miles	3434 Secor Rd	419-214-5555	M9MH+5V	Hot	11:00 11:00
Holiday Inn Express & Suites Toledo/Westgate	$109	2.5 miles	3440 Secor Rd	419-214-4700	M9MH+FV	Hot	3:00 11:00
Quality Inn	$75.04	2.5 miles	3560 Secor Rd	419-531-2666	M9PH+46	Breakfast Bag	3:00 11:00
Red Roof Inn Toledo-University	20% off regular rate	2.4 miles	3530 Executive Pkwy	419-536-0118	M9JF+QR	None	2:00 11:00
Residence Inn by Marriott Toledo West	$119	2.6 miles	3554 Secor Rd	419-724-2555	M9MH+VP	Hot	3:00 12:00
Wingate by Wyndham Sylvania/ Toledo	$188	7.0 miles	5480 S. Main St, Sylvania	419-517-2000	P77W+RV	Breakfast Bag	3:00 12:00

Saturday Afternoon Workshop

Title: Mathematical modeling tasks for calculus

Abstract: The calculus curriculum presents many opportunities to engage students with mathematical modeling. In this interactive workshop, we will see some examples of modeling in the small (tasks presented to students via short worksheets) and in the large (tasks structured as semester-long projects), and discuss the extent to which these activities do or do not fit into the modeling cycle.

Bio: Jim Fowler is an Associate Professor at Ohio State in the Department of Mathematics. His research interests broadly include geometry and topology and math education issues. Prior to working at The Ohio State University, he received an undergraduate degree from Harvard University and received a Ph.D. from the University of Chicago.

Participants can register for the Workshop on- line. The Saturday lunch will also be held at Phoenicia Cuisine in the Student Union. The lunch is $12.75 for a sandwich, side, chocolate chip cookie, and drink.

Continued on page 13

Workshop lunch information continued from page 12

For an additional $1.75, you can add a cup of hummus or bowl of rice. You may indicate your choices when you register on-line. There no is cost for Ohio NExT participants who are encouraged to attend.

BANQUET INFORMATION

The banquet will be held at Phoenicia Cuisine in the Lancelot Thompson Student Union (SU). Phoenicia Cuisine is located on the fourth floor of the Lancelot Thompson Student Union; the second floor is at ground level of the Centennial Mall.

Menu

Fattoush Salad
Falafel Balls
Beef Grape Leaves
Chicken Shawarma
Phoenicia White Rice
Pita Bread and Butter
Hummus Seasoned Pita Chips
Baklava Iced Tea
Lemonade—Iced Water - Coffee
Cash Bar
Cost: $20.00

Ohio Section Meetings

Spring 2022 Section Meeting—Xavier University

Fall 2022 Section Meeting -Cedarville University

Annual Miami University Mathematics Conference, Sept 24-25, 2021, Oxford, Ohio

MathFest & AMS JMM Meetings

MathFest 2022: Washington, DC | August 3-6, 2022

Mathfest 2023: Tampa, FL | August 2-5, 2023

MathFest 2024: Indianapolis, IN | August 7-10, 2024

AMS Joint Mathematics Meetings 2022

Seattle WA | January 5-8, 2022

AMS Joint Mathematics Meeting 2023

Boston MA January 4-7 , 2023

Announcement of 48th Annual Miami University Mathematics Conference — September 24-25, 2021

Online registration is open for the 48th Annual Miami University Mathematics Conference, September 24-25, 2021, in Oxford, Ohio. This year's theme is History of Mathematics, and keynote speakers will be David Richeson (Dickinson College) and Glen van Brummelen (Trinity Western University, Canada). A link to the conference website can be found here.

A Mathematical Limerick—Leigh Mercer

$$\frac{12+144+20+3\sqrt{4}}{7}+(5\times 11)=9^2+0$$

A dozen, a gross, and score
Plus three times the square root of four
Divided by seven
Plus five times eleven
Equals nine squared and not a bit more

OHIO FOCUS

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

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The deadline for the next newsletter is February 1, 2022
E-mail copy is preferred. Please send copy to the editor (see above), and also to the Section

Annual Meeting Program

With the exception of Social Time and Banquet in the Phoenicia Cuisine in the Lancelot Thompson Student Union (SU) , all activities will take place in the Memorial Field House (FH).

Friday, October 15

Time	Event	Location
12:00-4:00	Registration	Field House Lobby—East Side
12:00-1:00	Committee Meetings:	
	CONCUR (Curriculum)	FH 2200
	CONSACT (Section Activities)	FH 2210
	CONTEAL (Teacher Education & Licensure)	FH 2220
1:00-4:00	Vendor & Book Exhibits	FH Atrium
1:15-1:30	Welcome & Announcements	FH 2100
1:30-2:30	Invited Address: Matt Boelkins **"Zoom Silver Linings: How COVID Improved my Teaching"**	FH 2100
2:30-2:50	Break	FH Atrium
2:50—3:50	Invited Address: MB Rao **"The Wonderful World of Simulations—A Tribute to Stanislaw Ulam"**	FH 2100
4:00-6:00	Contributed Paper Sessions	FH 2200, FH2210, FH2220,
6:10-6:50	Social Time	SU
7:00-8:00	Banquet	SU
8:00-9:00	Invited Address: Sarah Greenwald **"Geometry of the Earth and Universe"**	FH 2100

Saturday, October 16

Time	Event	Location
8:00-10:00	Registration	Field House Lobby—East Side
8:00-10:00	Book Vendors & Exhibits	FH Atrium
8:00-8:50	Coffee & Pastries	FH Atrium
8:15-8:50	Local Arrangements Committee (if needed)	FH 2210
9:00-9:10	Welcome & Announcements, Student Competition Results	FH 2100
9:10-10:10	Invited Address: Sarah Greenwald **"How and Why the Association for Women in Mathematics was Founded and is Still Needed Today"**	FH 2100
10:10-10:30	Break	FH Atrium
10:30-11:45	Contributed Paper Sessions	FH 2200, FH2210. FH2220, FH2230
11:45-12:00	Break	Atrium
12:00-1:00	Invited Address: Alexander Hoover **"Swim, Pump, Fly: Modeling Propulsion in Fluid-Structure Interaction Systems"**	FH 2100
1:00-1:10	Closing Remarks	FH 2100
2:00 - 4:00	CONSTACT Afternoon Workshop **"Mathematical modeling tasks for calculus"**	tba

"Tis a favorite project of mine
A new value of π to assign.
I would fix it at 3,
For it's simpler, you see,
Than 3.14159". - Harvey L. Carter:

If M's a complete metric space
(and non-empty), it's always the case:
If f's a contraction
Then, under its action,
Exactly one point stays in place.— from Warwick Univ.

2021-2022 Ohio Section Officers and Committees

ELECTED OFFICERS

President
David Stuckey, Defiance College
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Past-President
Vacant

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Daniel Otero, Xavier University
otero@xavier.edu (2025)

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.

Program Committee

Najat Baji, Sinclair Comm. C. (2022)
Chris Swanson, Ashland University (2023)
Alicia Prieto-Langarica –YSU (2024)

CONTEAL

*Katie Cerrone Arnold, Univ of Akron (2024)
Aaron Blodgett, Univ of Findlay (2023)
Najat Baji, Sinclair Comm. C. (2024)
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M B Rao, University of Cincinnati (2022)
Chris Swanson, Ashland University (2022)

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Aurel Stan, Ohio State University (2022)
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Jim Fowler—Ohio State (2023)
Diana Eames, University of Akron (2022)
Glen Lobo, Sinclair Comm. C. (2022)
Giorgi Shonia, Ohio Univ. Lancaster (2024)

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David Stuckey, Defiance C. (President)
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Gordon Swain, Ashland University (2022)
M B Rao U Cincinnati. (2023)
Kyle Calderhead, Malone University (Secretary, nonvoting)

LOCAL ARRANGEMENTS FOR MEETINGS

Spring 2022: Xavier University
Danny Otero: otero@xavier.edu

Fall 2022: Cedarville University
Adam Hammett:
ahammett@cedarville.edu

"A mathematician named Klein
Thought the Mobius Strip was divine
He said "If you glue
the edges of two,
You get a weird bottle like mine"

Please report any errors or omissions to the Newsletter Editor: Brian Shelburne at bsheburne@wittenberg.edu.