# hio Focus

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# MAA Ohio Section Fall Meeting Friday-Saturday October 28-29 Cedarville University

The Fall Meeting of the Ohio Section MAA will be held at Cedarville University on Friday and Saturday, October 28—29, 2022 with the registration table located in the Health Science Building (right).

Located in southwest Ohio, Cedarville University is an accredited Baptist institution with an enrollment of around 5,000 undergraduate, graduate, and online students in more than 150 areas of study. Founded in 1887, Cedarville is one of the largest private universities in Ohio, recognized nationally for its authentic Christian community, rigorous academic programs, including



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the Bachelor of Arts and Bachelor of Science in mathematics, strong graduation and retention rates, accredited professional and health science offerings, and high student engagement ranking. For more information about the University, visit cedarville.edu.

# **Registration Information for Fall Meeting**

Online registration is *preferred*. The Section web site at <u>www.maa.org/Ohio</u> for one-stop registration, banquet reservation, and abstract submission will be open after Wednesday September 7, 2022. The deadline for meeting pre-registration and banquet reservations is Saturday October 18, 2022. Abstracts for contributed papers must be submitted by Friday October 14, 2022. 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. On-site registration will be held beginning 12:00 p.m. on Friday at the Health Science Building and will continue Saturday morning at 8:00 a.m. Meeting participants who are unable to register online at <u>www.maa.org/Ohio</u> may register by mail by sending the following information: name, affiliation, address, phone, e-mail address (if any), type of position, and banquet buffet reservation. Send with check, payable to Ohio Section MAA, for applicable fees [registration fee (\$45 ordinary registration, \$20 retired or part-time, no fee for students or first-time attendees), banquet buffet fee (\$22.00 per person)] to: Ohio Section MAA Fall Meeting, c/o Christina Osborne Department of Science and Mathematics 251 North Main Street Cedarville, OH 45314. Phone: 937-766-4896 . Registration by e-mail will be pending receipt of registration fees.

# From Our President—Chandra Dinavahi

In this first President's column I would like to thank the Nominating Committee and every member of the Ohio Section for giving me the opportunity to serve as Section President this year. My special thanks go to David Stuckey who helped me so much in the transition of duties.

Our Spring meeting was well attended at Xavier and it is great to see all the students participating in math competition. I wish to thank the Program Committee chaired by Najat Baji and the local arrangements coordinator Danny Otero for the wonderful Spring 2022 meeting of at Xavier University. We were treated with some excellent talks. Bradford Findell, David Stuckey, Ranthony Edmonds, and Matt Delong each gave outstanding talks. I particularly enjoyed the talk by Ranthony Edmonds "Dearth of Determinants" and had a lively discussion on this in my Linear Algebra class. Attending the Ohio section meetings have always invigorated me in the middle of each semester. So, I invite everyone to join us on October 28<sup>th</sup> and 29<sup>th</sup> at Cedarville for our Fall meeting. It will be hosted by Cedarville University with Christina Osborne as local arrangements coordinator. We



are looking forward to have a good meeting under her careful planning. I am also looking forward to an exciting line up of speakers.

The spirit of cooperation in the Ohio Section was clearly evident to me to me when I asked Section members to volunteer their time and talents to the section as I made appointments to our committees. The reaction makes me proud to be a member of this section. I always encourage to get involved with the section. I and many others who have held positions can tell you how rewarding it is. If you want to get involved in section there are many ways to get involved. We are always looking for people to volunteer to serve on one of our standing committees. It is a not huge time commitment as the committees do vast majority of their work during their meetings. The committees meet either virtually few days before the meeting or meet for an hour so before our section meetings. If you are a new faculty who is in their first five years of teaching consider joining Ohio NExT. As a former participant and Co-coordinator of Ohio NExT, this workshop is close to my heart. It is a wonderful opportunity to meet new faculty from the section, gain teaching and professional insights and to build connections in the beginning of your academic career. If you have newer members of your department, please encourage them to attend Ohio NExT. If you are interested in joining any standing committee or participating in Ohio NExT please contact me at <u>dinava-hi@findlay.edu</u> or one of the committee chairs.

We are pleased to congratulate Dr. Pam Warton as she is recipient of Ohio Section Award. I want to encourage you to consider nominating your colleagues for national MAA awards including the Henry L. Alder Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member (Deadline: October 1), the Gung and Hu Distinguished Service Award (Deadline: October 1), the Daniel Solow Author's Award (Deadline: October 1) and the Dolciani Award (Deadline: October 1). Additional information about the nomination process can be found on the national MAA website. Also, remember that nominations for the Ohio Section Teaching Award are due January 1.

Finally, I want to express my gratitude to all of you for allowing me to serve as your president for the next two years, and I look forward to seeing many of you in fall meeting in Cedarville.

# From Our Section Representative—Phil Blau

It was great to be at an in-person meeting of the MAA Congress that was held in Philadelphia just prior to MathFest 2022. Many thanks to Edray Goins, Congress Chair, for chairing a productive and engaging meeting as well as to Jenny Quinn, MAA President. I will briefly share some updates.

The MAA is beginning its strategic planning. This is just in the very early stages. I will keep the section informed as this process continues; the input of the membership is vital to this important endeavor that will help the association achieve its mission and vision.

The MAA will continue its virtual programming. Last year, there were 21 events and 800 registrants. MAA members are able to attend three virtual programming events for free.

Several new programs that aim to provide support for individuals who want to create, organize, and facilitate teaching-focused professional development opportunities were highlighted. The 2022 MAA



Professional Development Leadership Development Symposium consists of three online sessions in late September and early October. Registration is free but required. These are related to the OPEN MATH (Online Professional Enhancement and Capacity Building for Instruction Practices in Undergraduate Mathematics) program. To quote the website, a goal of this project is to "host over 40 workshops that serve some 1000 mathematics instructors and make a lasting impact on participant knowledge, skills, and uptake of research-based strategies in inclusive undergraduate mathematics instruction." The workshops developed in this program began in January 2022 and will run through the summer of 2025. More information is on the national website under Programs and the Professional Development item.

The congress was updated about a joint statement of the MAA and National Council of Teachers of Mathematics addressing how secondary schools and colleges should envision calculus courses as part of their efforts to meet the needs of current and future populations of mathematics students This can be found at https://www.maa.org/programs/faculty-and-departments/curriculum-department-guidelines-recommendations/joint-statement-teaching-calculus .

Other updates included information about relocation of the MAA Headquarters to 11 Dupont in the Dupont Circle neighborhood of Washington, DC. Currently the staff is working remotely, but once the move to the new building is completed, all members whose travels bring them to our nation's capital are encouraged to stop by and visit the new building. Additionally, the establishment of an award in honor of T. Christine Stevens for leadership development was announced. Likely there are several Project NExT Fellows in our section who would agree that the naming of an award after her is quite fitting. Please be sure to check out the most recent (2021) impact report at https://2021report.maa.org/ and continue to make use of the MAA Instructional Practices Guide. As always, feel free to let me know your input. You can email me at pblau@shawnee.edu.

# **Ohio Mathematics and Science Coalition**

A Report by David Kullman

The Ohio Mathematics and Science Coalition (OMSC) is an advocacy group comprised of individuals from the education, business, and public sectors, working toward a common goal of revitalizing and improving science, technology, engineering, and mathematics (STEM) education in Ohio, from preschool to beyond graduate school. Organizational members of OMSC include:

Ohio Council of Teachers of Mathematics (OCTM)

Ohio Mathematical Association of Two-Year Colleges (OhioMATYC)

Ohio Section of the Mathematical Association of America (MAA)

Ohio Technology and Engineering Educators Association (OTEEA)

Science Education Council of Ohio (SECO)

In the early 1990s presidents of the statewide mathematics and science professional organizations met with staff from the Ohio Department of Education and the Ohio Board of Regents to consider ways of promoting continuous, systemic, and sustainable improvement of STEM education in Ohio. This group, called the Council of Presidents, agreed that an independent structure, to be named the Ohio Mathematics and Science Coalition should be created to coordinate improvement efforts and help foster collaboration among stakeholders. As a recent past president, I was invited to represent the Ohio Section at those meetings.

Forty-one leaders from Ohio's education, business, and public sectors were invited to join the Coalition, and its first meeting was held on October 27, 1995. Since then, the Coalition has been meeting three times a year in October, February, and May. The next meeting will be held virtually on Friday, October 14, 2022. The speaker will be Bob Klein, from Ohio University, talking about "Challenging and Empowering Diverse Learners of Mathematics."

Some of the work of OMSC has included:

Participating in the development and review of Ohio's state mathematics standards.

Holding "Statehouse Days" to familiarize Ohio legislators with the organizations that fall under OM-SC's umbrella, and stressing the need to align efforts in STEM education.

Creating and disseminating a document, Finding the Solution: A Call for Collaboration.

Participating in the development and review of Ohio's state science standards.

Authoring position papers on *Mathematical Pathways* and *Uses of Large-Scale Assessments* (available online at http://www.ohiomsc.net/).

In 2021, OMSC began sponsoring a series of STEM webinars for parents and teachers, with the Ohio Section as a co-sponsor. The first of these featured MAA Past President Francis Su, who talked about ways that parents and educators can support the potential of every student to flourish in math. Other webinars have focused on mathematics and science as human endeavors, how these disciplines pervade our every-day lives, and why *all* students should be taking STEM classes. These webinars may be viewed online at http://www.ohiomsc.net/webinar.html.

# University of Dayton Hosting Biennial Event for Undergraduates

The Department of Mathematics will host its 30th Biennial Alumni Seminar on Saturday, November 5, 2022. Alums of the department will return to campus to talk to students about careers in mathematics. The event is anchored by the 22nd Annual Kenneth C. Schraut Annual Lecture, which will be delivered by Chris Cabanski, director of biostatistics at the Parker Institute for Cancer Immunotherapy. More information about the Alumni Seminar will be available at <a href="https://go.udayton.edu/MathEvents">https://go.udayton.edu/MathEvents</a>

# **Campus Notes**

From David Stuckey: **Defiance College** is pleased to welcome Dr. Seonguk Kim as a full-time faculty member. Dr. Kim obtained his Ph.D. from the University of Alabama at Birmingham and has most recently been at DePauw University.

From **John Carroll University**: Barbara D'Ambrosia past Departmental Chair at JCU and a longtime active member of the Ohio Section of the Maa retired at the end of May. Rebecca Fang is the new Departmental Chair at JCU.

The Department of Mathematics welcomed Visiting Assistant Professors Hakan Doga and Cemile Kurkoglu in Fall 2021 and Julian Mejia Cordero in Fall 2022. We are launching <u>a minor and B.S. in Applied Mathematics</u> in addition to our existing minor, B.A., and B.S. in Mathematics. In order to support this new program, we are hiring <u>two tenure</u> <u>-track positions starting Fall 2023 in statistics or applied mathematics</u>.

**Baldwin Wallace University** is proud to announce that Dr. Catherine Lane has been awarded tenure. Dr. Melissa Dennison has been promoted to Full Professor.

On August 16th Dr. Melissa Dennison was awarded the Strosacker Award for Excellence in Teaching. This is a life time achievement award. Congratulations to Dr. Dennison.

Dr. Melissa Dennison and Dr. Catherine Lane hosted the "Hands On" Math Camp for middle school students from July 26th to July 28th.

The Department of Mathematics at **Marshall University** welcomes Stephen Deterding as tenure-track Assistant Professor of Mathematics at the start of Fall 2022. Stephen received his Bachelor of Science degree in mathematics from Marshall University in 2012 and his Ph.D. degree in mathematics from the University of Kentucky in 2018. He was an Assistant Professor in the Department of Mathematics at West Liberty University until August 2022. His research areas are complex analysis, rational approximation, Banach Algebras, uniform algebras, and several complex variables.

Dr. David Cusick, Professor Emeritus retired in August 2021 after 49 years of active service at Marshall University. He was the department liaison for MAA Ohio Section for many years. Dr. Matt Carlton retired in August 2022 after 54 years of active service at Marshall University. Also, Dr. Evelyn Pupplo-Cody who was the Associate Dean of the College of Science retired in August 2020. We wish David, Evelyn, and Matt a fulfilling retirement.

Dr. Michael Schroeder is on sabbatical leave during the fall 2022 semester. Michael plans to make significant progress toward completing a textbook, maintain robust research progress, and discover new projects for student publications. He will also collaborate with faculty in the Australasian region and make a presentation at the Australasian Conference on Combinatorial Mathematics and Combinatorial Computing in December 2022.

The Department of Mathematics will host the 4<sup>th</sup> International Conference on Statistical Distributions and Applications (ICOSDA) on October 13 – 15, 2022 at the DoubleTree by Hilton Huntington, WV. Held every 3 years, ICOSDA provides a platform for researchers and practitioners to share and discuss recent advances in distribution theory and its applications. The conference encourages opportunities for research collaborations. More information about the conference is available at <u>www.icosda22.org</u>.

Marshall University and Mountwest Community and Technical College's Aviation Maintenance Technology program received its formal FAA certification. This makes the program the newest FAA Part 147 aviation maintenance technician school in the country and the first of its kind in the region.

The Mathematics Department at the **University of Dayton** welcomed three new faculty members this fall. Kyle Helfrich (PhD 2020, University of Kentucky) and Jun Li (PhD 2017, University of Minnesota) are tenure-track assistant professors, and Abhay Chaudhary (MS 2022, Miami University) is a lecturer. Andres Larrain-Hubach earned tenure and promotion to associate professor. Julie Simon won the 2022 College of Arts & Sciences Award for Outstanding Contributions by a Full-Time Non-Tenure-Track Faculty Member. Paul Eloe retired and was promoted to professor emeritus. Youssef Raffoul published his third book, the graduate text "Advanced Differential Equations" (Elsevier, April 2022). Jacob Shapiro won a Fulbright Fellowship and will spend the Spring 2023 semester in Australia.—*Campus Notes continued on page 8* 

# Friday October 28: - 1:30—2:30 pm

# Speaker: Carla Gerberry

*Title*: The Robert Noyce Teacher Scholarship Program and Teaching Experiences in High-Needs Communities

**Abstract:** A current need exists for qualified STEM teachers in high-needs districts who persist in the teaching profession. This talk will discuss the National Science Foundation (NSF) funded Robert Noyce Teacher Scholarship (Noyce) I had at Xavier. It was a community-engaged internship at an urban, liberal arts university. I will also discuss how it influenced undergraduate STEM students' decision to teach and highlight how experiences and mentorship helped our interns develop an appreciation for the teaching profession and reinforced the strategies interns needed to be effective classroom managers.

**Bio:** Carla Gerberry is an associate professor of mathematics at Xavier University. She teaches pre-service early and middle childhood teachers mathematics. Prior to being a faculty member at Xavier, she obtained her Master's degree in Curriculum and Instruction and Ph.D. in Mathematics Education from Purdue University. Her research interests are in self-efficacy and mathematics learning, and she has recently begun to delve into teacher noticing as a practice in her classes.

# Friday, October 28<sup>th</sup> – 2:50pm-3:50pm

Speaker: Matt DeLong, Marian University

Title: Child's Play—Mathematical Exploration and Exposition at MathPath

**Abstract:** MathPath is a four-week residential summer program for students aged 11-14 showing high promise and interest in mathematics. As Academic Director of the camp, I hire faculty and oversee the course offerings. I also help grade the Qualifying Test and run the Writing Plenaries at camp. In this talk I will give an overview of the MathPath program, share some of my favorite Qualifying Test problems from recent years, and discuss our approach to developing the campers as mathematical writers.

**Bio:** Matt DeLong is Professor of Mathematics and Chair of the Department of Mathematical and Computational Sciences at Marian University in Indianapolis. His Ph. D. is from the University of Michigan. Matt was awarded the Alder and Haimo awards for distinguished teaching from the MAA. He has served the MAA in various capacities including a decade on the leadership team of Project NExT, a recently concluded term as Chair of the Indiana Section, and currently as Chair of the Council on Meetings. Matt is also Academic Director of MathPath, an advanced summer program for middleschool students



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# Friday October 28<sup>th</sup> Banquet Talk, 8:00 – 9:00 pm

*Speaker:* Edray Goins, Pomona College

Title: Is It Fair To Ask Our Minoritized Students To Major In Mathematics?

**Abstract**: Many of us teach minoritized groups and first-generation / lowincome students in college who don't readily think of the mathematical sciences as a viable career option. Indeed, many of our students are concerned with ways to help out their families financially or seek paths that will provide opportunities to build generational wealth. Majors such as Computer Science, Economics, Political Science, and Pre-Health seem to make sense to those with families who encourage them to become doctors, lawyers, or the next Elon Musk. Is it fair to ask our minoritized students to major in mathematics?

In this interactive presentation, we weigh the pros and cons of doing so. We will have audience participation while tackling several difficult questions: What career options in the mathematical sciences can promote generational wealth? How do we justify encouraging our students to pursue careers in data science which have shown bias against people of color via faulty machine learning models? Are there cultural barriers keeping some groups of students away from math and statistics, such as focusing on the



historical work of ``old white men"? In the end, we hope this discussion will build some best practices on how to talk about the culture of the mathematical sciences with first-generation / low-income students.

**Bio:** Edray Herber Goins grew up in South Los Angeles, California. The product of the Los Angeles Unified (LAUSD) public school system, Goins attended the California Institute of Technology, where he majored in mathematics and physics, and earned his doctorate in mathematics from Stanford University. He has worked as a researcher at both Harvard and the National Security Agency; and has taught at both Caltech and Purdue. Goins is currently a Professor of Mathematics at Pomona College in Claremont, California. He has published over 25 journal articles in areas such as applied mathematics, graph theory, number theory, and representation theory; and on topics such as Diophantine equations, elliptic curves, and African Americans in mathematics. He runs a federally-funded Research Experience for Undergraduates (REU) titled Pomona Research in Mathematics Experience (PRiME).

# Saturday October 29<sup>th</sup> Morning Talk, 9:35 – 10:35 am

Speaker: Edray Goins, Pomona College

*Title:* A Survey of Diophantine Equations

**Abstract:** There are many beautiful identities involving positive integers. For example, Pythagoras knew  $3^2 + 4^2 = 5^2$  while Plato knew  $3^3 + 4^3 + 5^3 = 6^3$ . Euler discovered  $59^4 + 158^4 = 133^4 + 134^4$ , and even a famous story involving G.H. Hardy and Srinivasa Ramanujan involves  $1^3 + 12^3 = 9^3 + 10^3$ . But how does one find such identities?

Around the third century, the Greek mathematician Diophantus of Alexandria introduced a systematic study of integer solutions to polynomial equations. In this talk, we'll focus on various types of so-called Diophantine Equations, discussing such topics as Pythagorean Triples, Pell's Equations, Elliptic Curves, and Fermat's Last Theorem.

# Saturday October 29<sup>th</sup>, tba\* (see below)

Speaker: Anthony Vasaturo, Trine University

Title: A Two-Hour Tour of Fermat's Last Theorem

**Abstract:** Almost 30 years after the proof of Fermat's Last Theorem, it seems to still be a struggle for many students, hobbyists, and even professional mathematicians to find a succinct list of the materials needed to a) thoroughly prepare for a deep self-study of the theorem, and b) understand a fairly detailed summary of the proof of both Fermat's Last Theorem and the Modularity Theorem. Trained as a complex analyst with very little background in Number Theory or Algebraic Geometry, I felt the full depth of this confusion when I decided to embark on the journey to learn these results a few years ago. Because of this, I have vowed to help to rectify these issues by presenting the theorem to the mathematically interested and inclined population in whatever capacity I could manage. This workshop, along with my efforts on YouTube, aims to help facilitate further accomplishment of this goal. Come and spend two hours with me learning a detailed summary of the proof of Fermat's Last Theorem!



**Bio:** Teaching mathematics has been a love of mine since the moment I was given my first course when pursuing my master's degree, and this position has allowed me to actualize that love. I joined the faculty ranks at Trine University in Fall 2019. I received my undergraduate, master's and doctoral degrees from the University of Toledo, specializing in operator theory. However, my current interests have shifted dramatically into the realms of algebraic geometry and number theory. My hobbies include playing chess with my students. I encourage students to stop by during office hours to share a game or two! I am also a grip strength athlete and arm wrestler. There comes with this position a great sense of fulfillment; being able to shape and mold the minds of young students in the college years as they prepare to enter the workforce is something for which I will always be grateful.

\* Anthony Vasaturo's Tour of Fermat's Last Theorem is currently the CONSACT workshop scheduled for 1—3 PM Saturday afternoon if 10 or more sign up for the workshop; Otherwise Dr Vasaturo will present a one hour invited talk on the same subject from 12–1 PM on Saturday in HSC 107 Closing Remarks will be pushed back to 1:00—1:10 PM4.

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**Wittenberg University** is pleased to report that Dr. Alyssa Hoofnagle was awarded tenure and promoted to Associate Professor and Chair of the Department of Mathematics and Computer Science. Wittenberg University also welcomes a new faculty member, Dr. Sachith Dassanayaka, Assistant Professor of Data Science. Dr. Dassanayaka comes to Wittenberg from Texas State University after completing his PhD.

From Sinclair Community College: Our former chair, Karl Hess was appointed Dean of SME on July 1, 2022. Richard Uchida is now chair of the department. Wendy Cheng, Olga Stephens and Jim Willis retired at the end of last year. Najat Baji was promoted to Professor and Laura Phelps received tenure. Kerri Bentjen, Mathew Kerns, Jose Philip and Lani Wildow are new tenure-track faculty. Todd Stephens and Vicotria Kruglov are new full-time faculty.

# **Ohio MAA Section Project NExT**

The fall schedule for NExT will be abbreviated. Project NExT will host a lunch leading into the section meeting and will encourage NExTers to join us at the banquet if they are attending the Fall meeting

Questions or information about Ohio NExT should be addressed to Michael Schroeder at schroederm@marshall.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, and one way to recognize them for their excellence is to nominate them for the Ohio Section Award for Distinguished College or University Teaching of Mathematics. If you know of such an excellent educator, please consider nominating him or her for this honor. Note that this does not have to be someone from your own institution. Successful nominations have come from colleagues at other schools.

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 <a href="http://sections.maa.org/ohio/Award/">http://</a> <a href="mailto:sections.maa.org/ohio/Award/">sections.maa.org/ohio/Award/</a>. 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 2023 Spring Meeting of the Ohio Section, and appropriate publicity will be generated at the winner's home institution. The winner will be included in the pool of potential Ohio Section's nominees for any future 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 <u>kcalderhead@malone.edu</u> (preferred) or via postal mail to Kyle Calderhead, Department of Mathematics, Malone University, 2600 Cleveland Ave. NW., Canton, OH 44709. If you have questions or comments, please contact David Stuckey, Chair of the Teaching Award Committee, at <u>dstuckey@defiance.edu</u> or 419-783-2464. The nomination deadline is January 1, 2023.

# **University of Dayton Hosting Biennial Event for Undergraduates**

The Department of Mathematics will host its 30th Biennial Alumni Seminar on Saturday, November 5, 2022. Alums of the department will return to campus to talk to students about careers in mathematics. The event is anchored by the 22nd Annual Kenneth C. Schraut Annual Lecture, which will be delivered by Chris Cabanski, director of biostatistics at the Parker Institute for Cancer Immunotherapy. More information about the Alumni Seminar will be available at <a href="https://go.udayton.edu/MathEvents">https://go.udayton.edu/MathEvents</a>

# Math Corps at UToledo

From Dr. Funda Gültepe, Assistant Professor and Executive Director of Math Corps at the University of Toledo (<u>https://www.utoledo.edu/nsm/math-corps/</u>)

What is Math Corps at UToledo? Closely following the educational and mentoring practices of the MathCorps project (<u>https://mathcorps.org/</u>) originally started in 1992 by two professors at Wayne State University in Detroit, Michigan as a "humanitarian effort to help kids of the inner city" and it developed into a very effective mentorship program. They have been getting incredible results in Detroit since the 90's (you can see the stats in their website above) and they are nationally recognized. The Math Corps is about more than math skills: they prioritize mentorship through a "kids teaching kids" model, provide a positive learning environment and a strong sense of family.

What is the Math Corps Mission? The mission of the Math Corps is to empower and inspire children from underserved communities – through the teaching of mathematics and the fostering of self-worth, strong values and a sense of family – to build good lives for themselves and a more just society for all. The goal of the Math Corps is to ensure that every child, while cared for and supported in the present, goes on to graduate high school, fully prepared to succeed in college or other rewarding endeavor.

The Math Corps at UToledo is funded, in part, by a National Science Foundation award (DMS-2137611). It is also supported by Dean Marc Seigar and the College of Natural Sciences and Mathematics. Support has also been received from the City of Toledo and from Connecting Kids to Meals.

Funda stated "I am very proud to be a part of it, and I am very excited to be able to bring this program to the University of Toledo. We are partnering with MathCorps Wayne State and their other university partners including Cleveland State, University of Michigan, and Oakland University."

The Math Corps at UToledo partners are Debra Middleton (Program Coordinator), Dr. Alessandro Arsie (consultant, Professor of Mathematics at UT), Dr. Tod Shockey (consultant, Professor of Education at UT), and Dr. James Broda (Program Dean, Assistant Professor at the Washington and Lee University).

The Math Corps at UToledo officially launched in 2022 with its inaugural Summer Camp at the University of Toledo Main Campus. This was a four-week math camp for middle school (7th, 8th, and 9th grades) and high school (10th and 11th grades) students from underserved communities of Toledo that ran from July 11 to August 5. It was an educational as well as a mentorship program which brought together middle school and high school students with college students and professors in a family environment. As per the mission, as well as the requirements of the donations and grants supporting the project, we only accepted middle school and high school students from schools and addresses with Toledo postal codes.

Funda and all of her partners see this program as a social justice project, as well as an educational project. We want to encourage kids from underprivileged backgrounds to realize and pursue their greatness, and be willing to work really hard for that. The camp had very strict rules about homeworks, coming to class on time, being responsible and kind. High school students worked as mentors for middle school students and were paid a small salary. Math majors from our Department were team leaders of a team of ten middle school and five high school students. This was also a paid position (although small). The camp went Monday through Thursday from 8:30 to 3:30 for the middle school students. The high school students stayed for one extra hour in order to have team briefings at the end of the day.

There was a free breakfast and lunch provided by Connecting Kids to Meals every day of the camp. These meals had to be picked up in downtown Toledo and delivered to the University of Toledo Main Campus. This pickup and delivery service was provided by professors Jeongoo Cheh, Trieu Le, Hahn Nguyen, and Suohong Wang.

A special thanks goes to Wael El Khateeb and Suohong Wang for patiently teaching, tutoring, mentoring the kids.

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# **DRIVING INFORMATION**

Cedarville is located in the middle of a triangle formed by Interstate 70, 71, and 75.– where State Route 72 crosses US 42



**From the North:** I-75 south to I-70 east; travel approximately 24 miles to the Springfield/Cedarville exit (Rt. 72); travel south 11 miles on Rt. 72 to the campus. *(Approximately 38 minutes from downtown Day-ton.)* 

**From the South:** I-75 north to Cincinnati; merge with I-71; take I-71 north to the Sabina/Jamestown exit 58 (Rt. 72); follow Rt. 72 north to Cedarville. Proceed through Cedarville three blocks to the campus. *(Approximately 1 hour 17 minutes from downtown Cincinnati.)* 

**From the East:** I-70 west to the Cedarville/Springfield exit 54 (Rt. 72); travel south 11 miles on Rt. 72 to the campus. *(Approximately one hour from downtown Columbus.)* 

From the West: I-70 east to the Cedarville/Springfield exit 54 (Rt. 72); travel south 11 miles on Rt. 72 to

# **Hotel Information**

The following website has the information on local hotels that Cedarville University partners with:

https://www.cedarville.edu/admissions/visit/accommodations

Springfield is the closest city to Cedarville with the hotels on Leffel Lane (Baymont by Wyadham, Hampton Inn, Red Roof) and Raydo Circle (Comfort Suites, Holiday Inn Express & Suites) being the closest to Cedarville Univ.



**Parking** Area (circled in red): Park in the white spaces or spaces marked "visitor" in the Health Science Center and Stevens Student Center parking lots.

Health Science Center (8)

**Steven Student Center** (9)

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The camp had forty students enrolled. These students were given a Pre-Test before the program and a Post-Test on the last day of the camp. Here are the results:

Seventh Graders	
Eighth Graders	
Ninth Graders	

Pre-TestPost-Test34.50%62.08%45.25%82.50%26.20%80.62%

During the fall, the program will continue with Super Saturdays. This will be weekly meetings to keep track of the students' progress throughout the school year.

# **BANQUET INFORMATION**

Banquet – Buffet Style - \$22/person

Boursin Chicken Baked Fines Herbes Salmon Filet Cheese Manicotti Wild Rice Blend Fresh Green Beans Oven Roasted Vegetable Medley Fresh Fruit Salad Chocolate Cream Pie

# **Call for Presenters for Contributed Paper Sessions**

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. Presentations are 15 minutes in length with 5 minutes for questions and transition to the next presentation. 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 14, 2022.

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, Chris Swanson, by e-mail at <u>cswanson@ashland.edu</u> or by U.S. mail at

Chris Swanson Department of Mathematics and Computer Science Ashland University 401 College Avenue Ashland, OH 44708

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, projector and HDMI laptop connection. If you wish to project from an Apple device, then you must bring your own adapter. Internet access will be provided. Specific questions about technology availability should be addressed to Christina Osborne at christinaosborne@cedarville.edu.

# **Ohio Section Meetings**

# Spring 2023 Section Meeting –Baldwin-Wallace

Fall 2023 Section Meeting—OU-Lancaster

# MathFest & AMS JMM Meetings

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

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

# AMS Joint Mathematics Meetings 2023

Boston MA | January 4-7, 2023

# AMS Joint Mathematics Meetings 2024

San Francisco, CA |January 3-6, 2024

# **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 <u>sections.maa.org/Ohio</u>. Notification emails are sent using addresses provided by the MAA.

### Editor: Brian Shelburne, bshelburne@wittenberg.edu

Professor Emeritus - Department of Mathematics and Computer Science - Wittenberg University Springfield OH 45501

The deadline for the next newsletter is February 1, 2023 E-mail copy is preferred. Please send copy to the editor (see above), and also to the Section

### MAA Ohio Section Fall 2022 Program SSC = Stevens Student Center, HSC = Health Science Center Saturday, October 29 Friday, October 28. HSC Atrium 8:00-10:00 HSC Atrium 12:00-4:00 Registration Registration 12:00-1:00 CONCUR **HSC 106** 8:00-10:00 **Book Vendors & Exhibits** HSC Atrium (Curriculum) CONSACT Committee **HSC 108** 8:00-9:25 Coffee and Pastries HSC Atrium Meetinas (Section Activities) **CONTEAL** (Teacher Education **HSC 109** 8:50-9:25 Committee on Local Ar-HSC 106 rangements & Licensure) 1:00-4:00 Vendor & Book Exhibits Welcome and Announce-HSC 107 HSC Atrium 9:25-9:35 ments 9:35-10:35 1:15-1:30 HSC 107 HSC 107 Welcome and Announcements Invited address "A Survey of Diophantine Equations" Edray Goins 1:30-2:30 Invited Address "The Robert HSC 107 10:35-10:50 Break HSC Atrium Noyce Teacher Scholarship Program and Teaching Experiences in High-Needs Communities" Carla Gerberry 2:30-2:50 Break HSC Atrium 10:50-11:45 Contributed Papers Ses-HSC 105. 201,301,311 sions 11:45-12:00 HSC Atrium 2:50-3:50 HSC 107 Break Mathematical Exploration and Exposition at MathPath" Matt DeLong 4:00-5:15 **Contributed Paper Sessions** HSC 105. 12:00-12:10 Closing Remarks\* HSC 107 201.301.311 See page 8 5:15-6:00 Social Time Event locations are subject to change. Check the official program you receive when you register for the meeting in the HSC Atrium. Also check the OH Section webpage, www.maa.org/Ohio, for program updates, online registration, and contributed paper sub-6:00-7:00 SSC Banquet 240,245 missions. \*See page 8 for possible schedule change if CONSACT 7:00-8:00 Invited Address "Is It Fair To SSC Workshop does not run. 240,245 Ask Our Minoritized Students To Major In Mathematics?" Edray Goins

Ohio NExT Meeting: Fri Oct 28, 11:00-12:15, Off Campus

CONSACT Workshop: Sat Oct 29, 1:00-3:00,SSC 241

# 2022-2023 Ohio Section Officers and Committees

### **ELECTED OFFICERS**

### President

Chandra Dinavahi—Univ. of Findley dinavahi@findlay.edu (2024)

### Past-President

David Stuckey, Defiance College. dstuckey@defiance.edu (2023)

### **President-Elect**

Vacant

### **Section Representative**

Phil Blau, Shawnee State Univ. pblau@shawnee.edu (2024)

### Secretary

Kyle Calderhead, Malone Univ. kcalderhead@malone.edu (2024)

# Secretary-Elect

Vacant—TBD

### Treasurer

Tom Wakefield, Youngstown State Univ. tpwakefield@ysu.edu (2025)

### **Treasurer-Elect**

### **OTHER OFFICERS**

### **Department Liaisons Coordinator**

Chris O'Connor, Shawnee State Univ. coconnor@shawnee.edu (2024)

### Webmasters

Darren Wick, Ashland Univ. dwick@ashland.edu (2022)

Michael Schroeder, Marshall Univ. schroederm@marshall.edu (2022)

### **On-line Registration**

Zhijun Yin. yinzhijun@hotmail.com (2023)

### **Newsletter Editor**

Brian Shelburne, Wittenberg Univ. bshelburne@wittenberg.edu (2022)

### **Ohio NExT Organizing Committee**

Chandra Dinavahi, Univ. of Findlay dinavahi@findlay.edu (2023)

Michael Schroeder, Marshall Univ. schroederm@marshall.edu (2025)

Liz Haynes-Wiget, Wilmington College elizabeth\_haynes-wiget@wilmington.edu (2025)

### **OhioMATYC Liaison to OhioMAA**

Jim Anderson, Univ. of Toledo. jim.anderson@utoledo.edu(2024)

### **OCTM** Liaison

Liz Haynes-Wiget, Wilmington College. elizabeth\_haynes-wiget@wilmington.edu (2024)

### Archivist

Daniel Otero, Xavier Univ. 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

Chris Swanson, Ashland Univ. (2023) Alicia Prieto-Langarica –YSU (2024) Alexis Byers—YSU (2025)

### CONTEAL

\*Katie Cerrone Arnold, Univ of Akron Meli (2024) Aaron Blodgett, Univ of Findlay (2023) Fall Najat Baji, Sinclair Comm. C. (2024) Laurie Dunlap, Kent State (2023) Spri Bradford Findell, Ohio State Univ. (2024) son James Fitzsimmons, Wilmington College. (2022)

### CONSTUM

\*Matthew McMullen, Otterbein Univ. (2020) Jaki Chowdhury, Ohio Northern Univ. (2024) Matt Davis, Muskingum Univ. (2022) Alyssa Hoofnagle, Wittenberg Univ. (2023) M B Rao, University of Cincinnati (2025) Chris Swanson, Ashland University (2025) CONSACT \*Jim Anderson, Univ. of Toledo (2024)

\*Jim Anderson, Univ. of Toledo (2024) Ruma Dutta, Ohio State Univ. (2024) Aurel Stan, Ohio State Univ. (2025) Zhijun Yin, Univ. of Akron (2023) Phil Blau—Shawnee State Univ. (2023) Zijian Diao—Ohio Univ (2023)

### CONCUR

\*Anup Lamichhane, Ohio Northern Univ. (2024) Daniel Otero, Xavier Univ.(2023)

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

### **OTHER COMMITTEES**

### **Nominating Committee**

\*Zhijun Yin (2023) Kathryn Cerrone (2024) Chandra Dinavahi (President) Kyle Calderhead, Malone Univ. (Secretary, nonvoting)

### **Teaching Award Committee**

\*David Stuckey (Past-President) Gordon Swain, Ashland Univ. (2022) M B Rao Univ. of Cincinnati. (2023) Kyle Calderhead, Malone Univ. (Secretary, nonvoting)

### LOCAL ARRANGEMENTS FOR MEET-INGS

Fall 2022: Cedarville Univ. Christina Osborne: chistinaosborne@cedarville.edu

Spring 2023: Baldwin-Wallace Univ. Melissa Dennison

Fall 2023: OU-Lancaster. Paul Abraham

Spring 2024: Ashland Univ. Chris Swanson


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

9/18/22