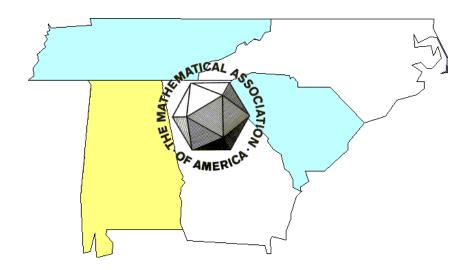
# Southeastern Section Newsletter



Fall 2024 Volume 42 Number 2

IMPORTANT SECTION MEETING INFORMATION HIGH POINT UNIVERSITY HIGH POINT, NC FEBRUARY 28 & March 1, 2025

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The Newsletter is published in April and November each year. The deadlines for items to be included in each issue are March 1 and November 1 respectively. Departmental News appears in the November newsletter only and is solicited from department liaisons.

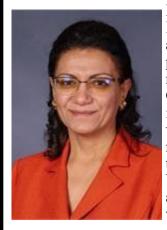
Material may be submitted to the editor on paper or by email, although email is preferred. Currently the newsletter is produced using Microsoft Publisher, which can import plain text files or files produced by most word-processing software.

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## **SECTION CALENDAR**

January 8-11, 2025 MAA-AMS Annual Meeting, Seattle, WA	
January 13, 2025 MAA SE Service Award nomination deadline	
January 23, 2025 Abstract submission deadline MAA SE Section M ing	eet-
January 23, 2025 MAA SE Teaching Awards nomination deadline	
February 27 & March 1, 2025: MAA-SE Sectional Meeting, High Point, NC	
August 6-9, 2024 MAA MathFest, Sacramento, CA	

## FROM THE CHAIR, MAA SE



Dear Members of the MAA Southeastern Section,

I am glad that we are issuing this fall 2024 newsletter of our Section after a period of relapse. There has been some confusion about the position of the newsletter editor, but we have straightened that out now and plan to have our newsletters regularly published. Congratulations to all our 2024 award winners that were recognized in our spring 2024 meeting at the University of Tennessee in Knoxville: Anne Duffee, Hwayeon Ryu and Karen O'Hara. Our website, maasoutheastern.org, has detailed information about the awards and the awardees.

We are very grateful to the officers whose term ended in spring 2024, and welcome their successors: Lauren Grimley (Newsletter Editor) was succeeded by Antara Mukherjee; Blayne Carroll (Section Lecturer) was succeeded by Jeneva Clark; Justin Allman (NC State Direc-

tor) was succeeded by Megan Powell; Emily Thomas (SC State Director) was succeeded by Denise Rangel-Tracy; Brad Schleben (NExT-SE Co-director) was succeeded by Sarah Eskew; and Ron Taylor was elected for the chair-elect position.

Our spring 2024 annual meeting was particularly memorable as we resolved to honor Bill Brodie. We were privileged to have him join us, enjoying his fellowship and finally righting a wrong from decades past. Sadly, we learned of Bill's passing on November 30, 2024. His legacy endures, and we are grateful to have honored him before his departure.

On the administrative side, the Executive Committee has been busy implementing several significant improvements to streamline our operations and enhance our efficiency:

1. **Centralized Bookkeeping**: We have utilized the library feature in MAA Connect to centralize our bookkeeping. This ensures that future members of the Executive Committee can easily access all necessary documents without needing to contact previous officers. All documents are now securely stored under the Executive Committee Members community.

2. **Organizational Charts**: We have developed organizational charts to facilitate the smooth operation of the Section and its affairs.

3. **Subcommittees with Specific Charges**: In addition to the regular committees formed by the chair, two subcommittees were established this year.

- **Bylaws Subcommittee**: Tasked with revising our bylaws and submitting them for MAA's approval. We are considering creating new positions within the Executive Committee, such as Student Activities Coordinator-elect and Vice Chair for Programs-elect, and discussing how these roles will impact the bylaws and election timing.
- Financial Subcommittee: This subcommittee has addressed several financial issues pertinent to the Section. One recommendation, approved by the Executive Committee, is to increase the registration fee for our annual meeting to help cover rising expenses. There are other recommendations that have been approved by the Executive Committee that may benefit you or your students. Please regularly check our website and our community in the MAA Connect for these opportunities.

Finally, I encourage you to use the MAA Connect platform to communicate with Section members. Check the rest of this newsletter for ways to serve in our Section or the MAA, visit our website frequently for updates and opportunities, and never hesitate to reach out to any Executive Committee officer with questions, comments, or suggestions.

As this will be my last contribution to the newsletter as chair of the Section, with my term end-

-ing at the conclusion of our Spring 2025 meeting, I want to express my deepest gratitude and honor for serving in this role over the past two years. The vibrancy and effectiveness of our Section are a testament to the dedication, responsibility, and professionalism of both current and previous officers.

Thank you for your continued support and dedication to our Section. Together, we can continue to thrive and make a positive impact.

Cordially, Caroline Maher-Boulis

## FROM THE MAA-SE REPRESENTATIVE



Greetings, colleagues and friends! I began my 3-year term as your representative to the MAA Congress in August of 2021 with the intent of passing the baton in July of 2024. During that 3-year period, the MAA and MAA Congress both updated their bylaws, and this role now has a 4year commitment. So, I come to you from my victory lap! During our meeting in the spring, we will elect my successor to this important and fulfilling position.

#### **Congress Meeting Report**

The 2024 Congress meeting was held on August 7 in Indianapolis, Indiana just prior to MathFest. It was led by MAA Congress Chair, Victor Piercey. Our agenda began with a report from MAA President, Hortensia Soto. She celebrated the success of the US contingent at the recent International Math Olympiad, where the US team won 1st place. Two students, Alexander Wang (3rd place) and Jessica Wan (5th place), were recognized for their individual achievements. She gave a development update, reporting that 1.6 million dollars has been pledged to the MAA to date this year. For context, she noted that at this time last year \$385,000 was pledged and that the sum grew to 2.3 million dollars by the end of 2023. On the publications front, Soto said that the MAA's renewal agreement with Taylor & Francis was in place. She expressed excitement over the <u>launch of the new Scatterplots journal</u>, offering particular thanks to Rick Cleary for his work on this project. Soto highlighted the <u>launch of the new</u> <u>MAA webpage</u>, thanking Kristen Morrison and her team for their ongoing work to develop the new platform. If you are having issues finding items you used in the past or if you have suggestions/corrections, just reach out to <u>webmaster@maa.org</u> for assistance.

MAA Executive Director, Michael Pearson, gave the Congress updates on the Strategic Plan and highlighted the <u>2023 Impact Report</u>. I highly encourage everyone to take time to look through the Impact Report to see firsthand what the MAA is involved with and what it has to offer.

#### MAA Governance and Getting Involved

There are 8 councils for the MAA, including a new Competitions Council, you can see listed <u>here</u> with leadership. Each council has numerous committees which you can see under the "Full Committee Listing" tab. I encouraged you to nominate yourselves and others for service on these committees. Everyone can get involved with something they are passionate about. You can also find the updated MAA Bylaws and Congress Bylaws here.

#### **MAA Programs**

There were 43 outreach programs funded this past year through the support of MAA donors. Anyone interested in such grant opportunities can check out the possibilities at <u>here!</u> If you missed a distinguished lecture or want to revisit key moments from MathFest, check out the <u>MAA YouTube Channel</u>!

#### MAA Membership

I would be remiss if I did not encourage you all to become members. If you are not sure about the types of membership available or the benefits to membership, please check out the following: <u>Membership Types</u> and <u>Member Benefits and Discounts</u>.

Let me close my update by sincerely thanking you for allowing me to serve in this position. I hope you to see you all at High Point University Feb. 27 - Mar. 1, 2025. Please feel free to reach out if you have any questions about joining or getting more involved.

Emily Hynds eahynds@samford.edu

## FALL EXECUTIVE COMMITTEEMEETING MINUTES

Nov 15 and 22, 2024 Frank Patane, Samford University Frank Patane, recording

Executive Committee Members Present:

Caroline Maher-Boulis, Emily Hynds, Andy Miller, Kelly Buch, Tricia Phillips, Jessie Hamm, Karen O'Hara, Jeneva Clark, Antara Mukherjee, Christopher Raridan, Deidra Coleman, Denise Rangel, Sarah Eskew, Megan Powell, Ron Taylor (Chair Elect), and Frank Patane.

Absent: Jimmy Miller

Meeting started: 5:05PM ET

1. Welcome and introductions of EC Members.

Andy commented about how it is effective that many state directors have the state talk in coordination with another meeting. This is a great way to increase attendance to the state event. Also virtual meetings are a good option. TN had particular

2. VC for two year colleges – Discussed about ideas for engaging two year colleges. This includes contacting department chairs, deans, coordinators, at two year colleges directly to encourage attendance at the 2025 meeting. We also discussed the possibility of a CURM grant that could connect faculty and undergraduates between 2 year and 4 year colleges, and could be an idea to help connect students between these institutions.

#### 3. State Directors:

a. GA: Their upcoming meeting is March 26th with lunch on Wednesday at Clayton State University.

b. AL: The AL state dinner was held on April 5th at the University of Alabama in Tuscaloosa with speaker George Lytle. The upcoming dinner is slated for February 7th, 2025 at Samford University with speaker Chad Awtrey.

c. TN: The TN state lecture was held virtually on November 6th. The speaker was Sarah Bleiler -Baxter of Middle Tennessee Univ. The event was advertised by emailing all math dept. chairs and was very well attended. See TN report for more details.

d. NC: The NC state talk was held at Mars Hill. They did not have a dinner this year but was well attended.

4. Section Representative: Emily talked about her report and including information in the newsletter about how to get involved. We can also circulate this information via MAA Connect.

5. **Student Activities Coordinator:** Talked about adding a button on the website to volunteer to be a judge, and how that was helpful. We also need a coordinator for undergrad posters. Also mentioned Emily Thomas has expressed interest in becoming the new student

activities coordinator when Karen rolls off. Feel free to send junior faculty to Karen to help at the spring meeting. DART offered to help out Karen.

6. **Treasurer:** Gave report and how our main income is from registrations and the main expense is from the spring meeting. Expenses were up last year since UTK hosted and is a larger school in Knoxville. Mentioned the possibility of having host institutions submitting some documentation about possible expenses.

7. VC for Programs: Andy showed how we had three workshop proposals for the upcoming 2025 meeting. He summarized the proposals with the details given in the report.

- a. Dan Kalman, Elementary Math models
- b. S. Bandyopadhyay & D. Nichols, Beyond PhD-Career at PUIs
- c. H. Ryu, A. Trocki, Strategies for Targeting and Assessing Conceptual Understanding

The committee unanimously approved all three workshop proposals.

Next Andy discussed the 5 special session proposals and recommended approval of all. The committee approved them all. Details for these proposals can be found in Andy's report. Andy discussed plenary speakers, which include Jeneva Clark, Hwayeon Ryu, Anne Duffee, and a visitor. Jeneva confirmed she would be a plenary speaker. Asked for input form the committee and we liked Tensia Soto, Ranthony Clark, and Naiomi Campbell. Also Lisa Marano and Victor Piercey. We recommended contacting Tensia, then Ranthony, then either Alan or Lisa.

8. Secretary: Frank submitted the 2023 annual report to MAA, and noted that the annual report run on a calendar year. Thus the 2024 report can only be submitted no earlier than 1/1/25. Frank submitted Anne Duffee and Hwayeon Ryu, our past teaching award winners, for the Haimo and Alder awards.

9. **Project Next Directors**: Deidre discussed about the need to reach out to department representatives for Project NeXt. Antara will send a list of email to Deidre and to Frank to post to MAA Connect.

10. Newsletter Editor: Antara has received the materials for the newsletter and will be working on it soon. Caroline noted how we did not have a newsletter last year and how it will be nice to have one.

11. Section Lecturer: Jeneva has nothing to report, but will email Antara a list of topics she can speak on. These topics can be included in the newsletter.

12. Committee member lists are up to date on our website. We discussed the make up of each committee.

- a. University of North Alabama is hosting in 2026 so not much for the site selection committee to do.
- b. The nominating committee for Section representative to replace Emily, and they have completed their task.
- c. The bylaws subcommittee was formed to discuss the revision of the bylaws. Jeff Clark is the chair of that subcommittee. One thing Caroline noticed is how the number of positions being elected each year is varying. For example, how this year we are electing 9 positions and it was 6 last year. Also we discussed creating a "position-elect" for more intensive roles to help prepare coming into these roles. Two roles would be VC for programs-elect and SAC-elect.

13. The financial subcommittee was chaired by Tom. Tom shared a total of 8 charges which are listed in the treasurer's folder on MAA Connect. Below we list these charges and the vote by the executive committee:

1. To discuss funding the MAA Representative's travel to MathFest to represent us. **Approved:** The Section will reimburse reasonable travel expenses for the Section Representative to the MAA Congress at MathFest after submission of a proposed budget and receipts and approval from the MAA-SE Treasurer and Chair.

2. To discuss funding any other member who needs to travel to represent the Section in meetings called by the MAA. Last year the chair was asked to, but had to ask Emily since she was planning to be there anyway but the chair wasn't.

**Approved:** The Section will reimburse reasonable travel expenses for a representative of the section to meetings called by the MAA after submission of receipts and approval from the MAA-SE Treasurer and Chair. The subcommittee requests that the MAA-SE Executive Committee ask the MAA Council of Sections for MAA funding for such travel.

3. To discuss funding the Section Lecturer's travel.

**Sent Back to Subcommittee:** The Section will reimburse half the travel expenses up to \$500 per event and\$1,500 per year for the Section Lecturer to give a talk after submission of receipts and approval from the MAA-SE Treasurer and Chair. It is assumed the other half of the travel expenses will be paid by the host institution.

There was a large discussion on item 3 above. In particular, suggestions were made to have the host school match the funds, how to advertise (or not advertise), and how to gauge which schools were in a financial situation that they really needed these funds.

The meeting ended at 7:33pm, and we agreed to meet again.

The second meeting commenced on 11/22 at 5:36pm and we resumed with a discussion on the 4th charge of the financial subcommittee:

4. To discuss charging high school students for conference registration, and if so, how much. **Approved**: The registration fee for high school students should be the same as that for an undergraduate student.

5. To discuss registration fees for community college attendees:

Approved: The registration fee for community college students should be the same as that for an undergraduate student.

6. To discuss helping with travel funds for students. We have been asked at least a couple of times if the Section would help fund some students' travel.

**Approved**: The Section will provide up to 10 travel grants for up to \$250 each to students or faculty, based on need, to cover travel expenses to the annual MAA-SE meeting. Recipients will be chosen based on an application process.

7. Based on all the above, should we increase our registration fees?

**Approved**: The registration fees for students should be increased by \$5 (\$20 early, \$30 late) and for faculty by \$10 (\$40 early, \$60 late).

8. Discuss requirement to include proposed budget in hosting site application (and in solicitation letter).

**Approved in amended form**: Applications from potential hosting institutions should include a proposed budget.

**MAA-SE will supply a prefilled form with historical averages for use with this budget**. This stipulation should be included in the solicitation letter. Note that potential hosting institutions might need additional lead time to include this estimate.

We then heard from Karen O'Hara about High Point hosting the MAA 2025 meeting. Karen shared maps with locations, pictures or rooms and technology accommodations. Key points:

- 1. Parking is free
- 2. Blocks of hotels are reserved for limited time
- 3. HDMI ports and computers in presenting room. Bring an adapter if they have Macs
- 4. There are whiteboards and there should be plenty of markers and erasers
- 5. EC Voted and Approved
  - a. To have Project Nexters invited to EC dinner
  - b. High Point will cater the EC dinner
  - c. EC will pay for Project Nexters dinner
- 6. Karen gave a full budget and the total will be in the \$9,000s
- 7. Sponsors are a great source of additional revenue to defray costs.
- 8. Wifi Access is HPU-Guest

Meeting ended 7:33pm

#### 

## STAY CONNECTED WITH THE SOUTHEAST SECTON!

The MAA Southeastern Section now share information and media from all of our activities on Twitter (@maasoutheast) and Facebook (<u>www.facebook.com/MAASoutheast/</u>). Follow us on Twitter and Like us on Facebook!

You may also like to connect with our MAA SE community via MAA Connect. You can post messages via email, and connect/ collaborate with your peers. (https://connect.maa.org/home)

For those looking to be more involved with the organization of the section, there's a public Facebook Group for discussion (<u>https://</u>www.facebook.com/groups/370619956452453/).

#### LOOKING FOR A GREAT MATHEMATICS SPEAKER?

**Invite the Southeastern Section Lecturer to your campus!** Many think the Section Lecturer only delivers an address at the Annual Meeting of the Section, but this person also visits individual institutions within the Section.

Dr. Geneva Clark at UT Knoxville is the 2024-2025 Section Lecturer. Contact her at <u>dr.jenevaclark@utk.edu</u>

#### Make your arrangements today!

## **STATE DIRECTOR ANNOUNCEMENTS**

#### From Tricia Phillips, State Director of Alabama

The 2024 MAA Alabama State Dinner was held on Friday, April 5, 2024 at the University of Alabama in Tuscaloosa, AL. The banquet speaker was Dr. George Lytle of the University of Montevallo. He gave a talk entitled "Modeling Governance Structures in Managing Epidemics." The 2025 MAA Alabama State Dinner will be hosted by Samford University on Friday, February 7<sup>th</sup> at 6pm in conjunction with the Alabama Association of College Teachers of Mathematics (AACTM) Conference that weekend. The keynote speaker will be Dr. Chat Awtrey speaking on "When is a polynomial isomorphic to an even polynomial?" for a general audience

#### From Christopher Raridan, State Director of Georgia

We will be having the 2025 Georgia State Luncheon on Wednesday, March 26, in conjunction with the 4<sup>th</sup> Annual College of Information and Mathematical Sciences (CIMS) Symposium on the campus of Clayton State University, located about 15 miles south of Atlanta. The theme of the Symposium is "AI Driven Quantum Leaps in Science and Technology."

Yes, I know it's the middle of the week. Take a "day off" from your usual grind and bring a few students with you! There will be a full day of activities to keep you and your students occupied and engaged.

CIMS has in the past few years absorbed the biology, chemistry, and physics majors, and this Symposium is intended to draw faculty and students from all areas to learn how artificial intelligence is shaping the STEM fields.

Faculty are strongly encouraged to bring students with them to the Georgia State Luncheon! Indeed, we are quite hopeful that students who are working on research projects will participate in the Student Poster Session at the Symposium, and we may need a few faculty members to help with the judging.

Clayton State University and CIMS cordially invite faculty and students from the Great State of Georgia as well as neighboring states to attend the 2025 MAA-SE Georgia State Luncheon and the CIMS Symposium on Wednesday, March 26. Please mark your calendars. More information, including registration, will follow shortly. There is no cost of attending, other than your personal travel costs.

We look forward to seeing you at the 2025 Georgia State Luncheon!

#### From Megan Powell, State Director of North Carolina

Schools in Western North Carolina were severely impacted by Hurricane Helene that hit the area on September 27, closing schools for weeks due to the damage. An enormous thank you to all who reached out to support online educational resources, financial support for educators,

space to host events, and covering duties faculty were unable to attend to during the month after the hurricane. The NC State Dinner was scheduled on November 13 at UNC Asheville, which unfortunately was unable to host the dinner due to hurricane related issues, but the lecture part of the dinner on the Geometry of Privacy by Francis Su moved to Mars Hill University. Over 90 math enthusiasts attended the event with great examples on how to achieve accurate information while keeping personal details private online.

#### From Denise Rangel-Tracy, State Director of South Carolina

The 2023 SC State Dinner was held in conjunction with the Carolina Math Seminar on November 3rd at Allen University in Columbia, SC. Dr. Thomas Hoffman from Coastal Carolina University gave a talk titled FROM RUBIK'S CUBE TO TEXTILE ARTS: MOTIVAT-ING STUDENTS IN ABSTRACT ALGEBRA. Approximately 50 people were in attendance. Currently, the Carolina Math Seminar is no longer being held. We are thankful to the past organizers for the many years of SC state dinners that were held together. The next SC state dinner is planned to be held at Francis Marion University in April 2025. More details to follow.

#### From Kelly Buch, State Director of Tennessee

The 2024 State Lecture for Tennessee was held virtually on November 6<sup>th</sup>. The speaker, Dr. Sarah Bleiler-Baxter of Middle Tennessee State University, gave an address entitled "Why Students Stay In or Consider Leaving the Mathematics Major." She discussed the results of a nationwide survey of math majors and the implications on retention and recruitment. The event was well attended, with folks from at least 10 colleges and universities across Tennessee in attendance. Thanks to all who joined! Email the Tennessee State Director (buchk@apsu.edu) for access to the recording.

Also, special thanks to the University of Tennessee Knoxville for hosting our sectional meeting in March 2024. It was great to see a strong representation of folks across Tennessee at the meeting.

Nominations of folks from Tennessee for the MAA Service Award and Teaching Awards can be sent to the state director (<u>buchk@apsu.edu</u>) or you can find more details about the awards in this Newsletter.

Anyone from Tennessee interested in serving on the MAA SE executive board in the future should contact the Tennessee Nominations Committee representative, Committee representative, Anant Godbole (<u>GODBOLEA@mail.etsu.edu</u>).

## <u>News from the Campuses</u> <u>Fall 2024</u> <u>MAA Southeastern Section</u>

#### Brevard College (Brevard, NC)

Brevard College received an Appalachian College Association grant to purchase 13 virtual reality (VR) headsets and develop a program to use the headsets in Calculus III. Students are now able to use the VR headsets to join a collaborative space with their professor where they can draw, graph and interact with three-dimensional objects. This has eliminated a lot of hand -waving and poor two-dimensional projections of three-dimensional space. Students have engaged well with the headsets and have appreciated the different presentation style as well as the superpower of being able to fly around and draw in outer space. The headsets truly have been beneficial for students' understanding of vectors, multivariate functions, quadric surfaces, gradients, tangent planes, optimization and more.

#### College of Charleston, (Charleston, SC)

The mathematics department at the college is now known as The Department of Mathematics and Statistics. Dr. Tom Kunkle is the new chair of the department.

#### East Carolina University, (Greenville, NC)

The Mathematics Department currently has 63 undergraduate (Bachelor's level) students and 9 graduate (Master's level) students majoring in mathematics.

Faculty News

Retirements: Dr. Salman Abdulali; Dr. Zackary Robinson.

New Hires: Dr. Siegfred Baluyot as a tenure-track Assistant Professor; Ms. Samantha Kirk as a Teaching Assistant Professor.

Promotions: Dr. Imre Patyi and Dr. Guglielmo Fucci were promoted to full Professor. Grants: Dr. Sungwoo Ahn received the AMS-Simons Research Enhancement Grant for Primarily Undergraduate Institution (PUI) Faculty

Undergraduate Students News

Mr. Cole Barritt completed our Mathematics Honors Program under the guidance of Dr. Heather Ries and is currently completing a semester abroad study at the Universität Freiburg in Germany.

Graduate Students News

Two of our recent graduate students went on to PhD programs. Mr. Caedmon Ragland is pursuing a PhD in Mathematics at the New Mexico State University; Mr. Craig Cohen is pursuing a PhD in Economics at the Michigan State University.

Outreach News

Each Spring, the Department organizes the Math Contest, a mathematics competition for the high school students from Eastern North Carolina. 258 students participated in the Spring 2024 competition which took place on March 20, 2024.

#### Francis Marion University, Florence, SC

The Department of Mathematics welcomed Dr. Denise A. Rangel Tracy as an Assistant Professor of Mathematics from Fairleigh Dickinson University and Dr. Jordan Kirby as Assistant Professor of Mathematics from Middle Tennessee State University (PhD 2023) in August 2023. Dr. George "Buck" Schnibben, Jr., and Dr. Sophia Waymyers retired April 2023. Buck joined the university as an Assistant Professor in 1984, and Sophia joined university as an Instructor in 2004.

Dr. Sharon K. O'Kelley was elected as Chair of the Faculty for academic year 2023-24 and reelected for 2024-2025. Drs. Ivan Dungan and Dan Scofield were awarded tenure and promot ed to Associate Professor of Mathematics in Spring 2024. Dr. Kevin LoPresto was elected Vice-President for Post-Secondary Education of South Carolina Council of Teachers of Mathematics (SCCTM) in November 2023.

Dr. Denise A. Rangel Tracy published "Minimal Free Resolutions of Edge Ideals of Edge-Weighted Complete Bipartite Graphs" jointly with B. Kubik and K. A. Sather-Wagstaff, in the Proceedings of 2022 Association for Women in Mathematics Research Symposium, Springer (2024). Dr. Kevin LoPresto presented "Using Desmos to Visualize the Unit Circle and Transformations of Functions in Pre-Calculus", and Dr. Nicole Panza presented "Piecing Together a Direction Field" at MAA MathFest in Indianapolis in August 2024. Dr. Scofield presented "Predicting self-distributive algebraic structures through machine learning" in AMS Special Session on Knots, Skein Modules, and Categorification", and Dr. Denise A. Rangel Tracy presented "Understanding EvenQuads" and "EvenQuads Live and In Person: The Honorees and the Games" at the Joint Mathematics Meetings special session San Francisco in January 2024. Dr. Ivan Dungan was awarded a NSF EPSCOR and REAL grant for Mentoring Research students for the Summer 2024. Dr. Dan Scofield was awarded SC EPSCoR SAN grant "Engaging URM, Women and Students with Disabilities in Machine Learning Research". The department established a minor in Statistics in academic year 2021-22 and had its first student graduate with the minor in Spring 2024.

Eight students attended the SC EPSCoR Conference in Columbia, SC, in April 2024 with Bhakti Patel awarded First Place Undergraduate Student Poster Presentation for "Predicting Customer Status through Bayesian Networks with Imbalanced Data Handling". Three students attended the Nebraska Conference for Undergraduate Women in Mathematics 2024 with Morgan McCaskill presenting "Conservation Element and Solution Element Method (CESE) Applied to Euler Equations" and Bhakti Patel presenting "AI Consulting Project for CBEC comparing Naïve Bayes and Non-Naïve Networks to Mitigate Limitations in Collected Data". Five undergraduates and one graduate student attended SACNAS, a National Diversity in STEM Conference, in Phoenix in October 2024. Two students were accepted to present posters of their research. Luke Poston presented "Modeling Granular Flow Dynamics Using the Discrete Element Method", and Brianna Bradley presented "The Guide for Success in STEM". Seven students attended the 2024 MAA-SE meeting at UT Knoxville. Two teams participated in Math Jeopardy and three students (Katarina Floyd, Morgan McCaskill, and Bhakti Patel) presented posters.

Three students and one faculty member were inducted into Francis Marion's chapter of Kappa Mu Epsilon, the South Carolina Epsilon Chapter in October 2024.

Georgia Gwinnett College, (Lawrenceville, GA)



Mathematics faculty Rabia Shahbaz, Ekaterina Nathanson, Sarah Park and Jamye Curry of Georgi College savage presented at the annual AMATYC conference.

They are recipients of ALG transformation and continuation grants which have supported their work.

#### Georgia State University, (Atlanta, GA)

Our undergraduate program currently enrolls 141 math majors; in the spring and summer of 2024 a total of 18 students graduated with a B.S. in Mathematics. Our graduate program currently enrolls 56 M.S. and 54 Ph.D. students in Mathematics and in Statistics (combined). In Fall 2024, the department welcomed three new faculty members. Dr. Russel Jeter joined the department as an Assistant Professor, Dr. Bosu Choi as an Academic Professional, and Dr. Mona Baroonian as a Visiting Lecturer.

During the past year, the department faculty successfully secured a number of research grants Drs. Alexandra Smirnova and Xiaojing Ye, as the PI and co-PI, respectively, have received an NSF grant for 2024-27 to work "On Iteratively Regularized Alternating Minimization under Nonlinear Dynamics Constraints with Applications to Epidemiology". On May 3-5, 2024, Dr. Yichuan Zhao successfully organized the 9<sup>th</sup> Workshop on Biostatistics and Bioinformatics partially sponsored by a grant from the NSF at Georgia State University. Two faculty members in our department are recipients of the 2024 Faculty International Research Engagement (FIRE) mini-grants sponsored by GSU's Office of International Initiatives. This program offers seed grants for faculty initiatives in study abroad and virtual exchange. The awardees are Dr. Florian Enescu for the project "Combinatorial Invariants in Prime Characteristic Commutative Algebra" and Dr. Pejman Sanaei for the project "Mathematical Modeling of Membrane Filtration". Our graduate and undergraduate students keep busy too and have a number of achievements to show. In the end of the 2023-24 academic year, the Georgia Zeta Chapter of Pi Mu Epsilon, the national mathematics honors society, held its annual induction ceremony for its new members: Victor Agboli, Felipe Benitez Ulloa, Naomi Fox, Anna Johnsen, Errol Mclean, Andalib Samandari, Jeremiah Tella, Lawan Wijayasooriya, Guimin Xia, and a faculty inductee Dr. Mark Grinshpon. In Spring 2024, our students attended and presented at the AMS Southeastern Section's meeting, MAA Southeastern Section's meeting, Troy Math Fest, and other conferences. In the Summer, Amy Sims (undergraduate), Emeka Mazi, and Haniyeh Fattahpour (both graduate) received a highly competitive travel award to attend the 77<sup>th</sup> Annual Meeting of the American Physical Society Division of Fluid Dynamics (APS-DFD) in Salt Lake City, Utah, to present their projects. As of Fall 2024, the department is offering a new Ph.D. concentration in Machine Learning and Data Science.

#### Kennesaw State University (Kennesaw, GA)

In Jan 2024, the department welcomed Dr. Erik Westlund to his new role as interim department chair.

Retiring from KSU at the end of Spring 2023 were Dr. Meghan Burke, Dr. Sarah Heuss Holliday, Dr. Jonathan Lewin, and Dr. Pinder Naidu. We welcomed Drs. Emanuel Indrei, Daniel Irvine, Alexander McDonald, Md Masud Rana, in the Assistant Professor position in addition, Dr. Lihong Zhao, Dr. Yue (Emily) Kang, and Feray Aktas, joined the department as lecturers . Several of our faculty also received awards and grants: Dr. Ana-Maria Croicu was awarded the 2024 College of Science and Mathematics' Distinguished Professor Award and 2023-2024 University Distinguished Professor.

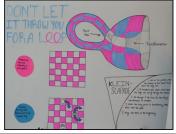
Dr. Eric Stachura was awarded a three-year \$220,000 grant from the Department of Defense for his work *Analysis of the bi-anisotropic Maxwell equations on domains with rough boundaries.* Dr. Dhruba Adhikari was awarded a \$10,000 Promising Research Projects Initiative (PRePI) Award from the KSU College of Science and Mathematics for the project *Homotopy Methods for Elliptic and Parabolic Boundary Value Problems in General Divergence Form.*  Dr. Timothy Faver was awarded a three-year \$9,000 Research Enhancement Grant for PUI Faculty from the American Mathematical Society and Simons Foundation for 2024-2027. Dr. Timothy Faver was awarded a three-year \$134,001 grant from the NSF Division of Mathe-matical Sciences (DMS) for the project *Nonlinear Waver in Discrete Heterogeneous Media*. Our undergraduate degree program is healthy. We currently have 162 students who have declared a mathematics major and 167 students who are pursuing a mathematics minor. Each has about 25-30 graduates per year. Recruitment efforts are ongoing to attract more students to our major/minor.

#### Lee University, (Cleveland, TN)

Dr. Marcie Williams joined Lee's Department of Mathematical Sciences as an assistant professor of engineering. Prior to Lee, she taught high school physics at Ooltewah High School for the past 10 years. She completed her postdoctoral research at Harvard Medical School where she studied cell signaling in white blood cells and endothelial cells. Prior to that, completed a Ph.D. in Biomedical Engineering at Georgia Tech and Emory University and a M.S. in Chemical Engineering from the University of Oklahoma.

#### NC State University, (Raleigh, NC)

The mathematics department is actively engaged in research, student success, and community outreach. Here are some highlights: The Directed Research for Undergraduates in Mathematics and Statistics (DRUMS) REU Program offers undergraduate students intensive summer research opportunities in mathematics and statistics. Participants engage in projects spanning disease modeling, physiology, extreme weather events, and finance, under the guidance of NC State faculty. DRUMS is supported by the NSA and NSF. The Uncertainty Quantification for Life Sciences (UQ4Life) Research Training Group is an interdisciplinary initiative aimed at enhancing the integration of statistical, mathematical, and life sciences. Funded by NSF UQ4Life supports undergraduate and graduate students, as well as postdoctoral fellows, in building interdisciplinary research programs. In collaboration with high school educators, Dr. Arvind Saibaba developed self-contained teaching modules that integrate advanced mathematical concepts topics like image processing, x-ray imaging, social networks etc. into high school curricula. These modules (available here: https://asaibab.math.ncsu.edu/outreach/) The development of these resources was supported by an NSF grant. Graduate student Patrick Haughey has been awarded the 2024-2025 NC Space Grant Graduate Research Fellowship. His research focuses on the recovery of satellite imaging in perturbatory environments, conducted under the supervision of Drs. Tsynkov and Gilman. He will present his findings at the NC Space Symposium at NC State on April 11, 2025. Mathematics major David Sieg received the 2024 College of Sciences Student Leadership Award, which recognizes a senior who exemplifies leadership within the College of Sciences and the broader NC State community. Four mathematics majors have been accepted to present their research at the Joint Mathmatics Meetings in January 2025.



Westview high school students made the Kleinscapade poster above for the Math Craft. Laboratory open house to describe a game of checkers played on a Klein bottle. Dr. Shalmali Bandyopadhyay was selected as a Project NExT fellow on June 1, 2024. .Dr. Jason DeVito received the Cunningham Outstanding Teacher/Scholar Award in March 2024.. In June 2024 Dr. DeVito received a \$136,007 grant from the NSF under their Research in Undergraduate Institutions (RUI) program. This funding supports his project titled "RUI: Quotient Spaces and the Double-Soul Conjecture,"

Five faculty and six students attended the MAA-SE section meeting at UT Knoxville March 14 - 16, 2024. Undergraduate student Peyton Johnson gave a talk. Undergraduate student Larissa Renshaw presented a poster.

Currently we have 17 math majors.

Lecturer Pamela Guerrero gave a talk at the MAA-SE section meeting at UT Knoxville in March 2024.

Five faculty and six students attended the MAA-SE section meeting at UT Knoxville March 14 - 16, 2024. Undergraduate student Peyton Johnson gave a talk. Undergraduate student Larissa Renshaw presented a poster.

The following academics joined our department recently:

Tandie Lacquement Dahlonega Campus Lecturer Ellen Graveman - Oconee Campus Lecturer .

Leslie Davidson-Rossier is the new Governor's Teaching Fellow

Currently, the department has 61 full-time Faculty. The Math department just rolled out a new Data Science minor. Faculty members Edward Green and Dianna Spence will be retiring at the end of Fall 2024. Mr. Jeff Shrader plans to retire in May 2025.

Dr. Ala Balueva published the manuscrip (with student Wynn Kwiatkowsky):

Balueva AV, Dashevskiy IN, Kwiatkowsky W., Lisovenko D.S. (2024). Chemical Reaction and Strength of Tricalcium Phosphate Nano-Coating Application on Dental Implants by Atomistic Calculations. *Applied Mathematical Modeling*, <u>Volume 127</u>, March 2024, Pages 640-654.

#### The Citadel, (Charleston, SC)

The Math Department welcomed a new department head Dr. David Edwards after Dr, Mei Chen stepped down from the position of chair after serving for 10 years in the position. Dr. Edwards is an expert in Data Analytics and Statistics.

We currently have 14 math majors including three double majors we share with Psychology, Finance, and Accounting.

The department is now offering its new Data Analytics and Statistics concentration.

Our math majors solved several open problems from journals last year and a few of them are pursuing long term research projects on various topics. Students presented their research at the Academic Excellence Day hosted by The Citadel in April 2024 and presented at the SCAS (South Carolina Academy of Sciences) annual meeting in the spring. The department successfully hosted the Lowcountry Research Experience for High School students and Teachers in the summer of 2024 supported by the MAA Dolciani Math Enrichment Grant. This is the third year we have hosted this summer experience, which is a week-long problem-solving experience culminating in an event where the students present their work. Faculty members published several peer-reviewed articles during this past year and presented at national/ international conferences.

Dr. Todd Wittman was promoted tot the position of Professor in the past year and he received two teaching awards: First, the C.A. Medberry award for dedication to teaching was presented to him by the college and secondly, the South Carolina Academy of Science (SCAS) Teaching Award was also awarded to him last year. Instructor Melissa Myrick was the recipient of the college-wide Faculty Excellence Award for Non-Tenure Track Teaching.

#### **University of Georgia, Athens, GA**

The math department have been approved to offer an area of emphasis in the Mathematics of Data Science beginning Fall 2025. This year, the department was awarded a \$2.5 million Research Training Group grant from the NSF. Led by PI David Gay, the group spans the interrelated areas of algebraic geometry, symplectic geometry, and geometric topology, and includes a collaboration with the UGA Arts Collaborative on mathematical visualization. Jennifer Royal organized UGA's first Industrial Mathematics Day in April 2024. Several UGA math alumni returned to campus to network with students and speak about their experiences working in industry. This will be an annual event, with the next one held February 8, 2025.Recent notable faculty honors include Paul Pollack's election as a Fellow of the AMS, and Sybilla Beckmann's receipt of the AMS Award for Impact on Teaching and Learning of Mathematics. Former Department Head Neil Lyall is now Associate Dean of the Franklin College of Arts and Sciences. Michael Usher started his term as Head this fall. We welcomed Emily Crawford Das and David Plaxco as Lecturers in August 2024. New Assistant Professors Nate Harman and Tomasz Szarek joined the department in August 2023.

#### University of South Alabama (Mobile ,AL)

The Department of Mathematics and Statistics at the University of South Alabama had a dynamic and productive year. In 2023-2024, 24 students engaged in research projects directed by nine faculty members. The department faculty published 31 peer-reviewed journal articles and gave 61presentations. Dr. Aparna Upadhyay joined the department and Ms. Tonya Darby retired after many years of dedicated service. Outreach has continued to be a cornerstone of the department's mission. Programs such as the Mobile Math Corps, the Mobile Math Circle, the High School and Middle School Math Olympiads, Girls in Math at South, and the MaPP Puzzle have reached hundreds of students in the region, sparking interest and enthusiasm for mathematics. In Fall 2023, under the leadership of Dr. Cornelius Pillen, the department successfully hosted the American Mathematical Society's Fall Southeastern Sectional Meeting. The conference brought approximately 300 mathematicians from institutions across the United States to the University of South Alabama campus, solidifying the department's role as a hub for mathematical collaboration and innovation.

#### University of Tennessee at Martin (Martin, TN)

Longtime chair, Mr. Tom Eskew, retired in December 2022. Dr. Steve Elliott became chair on July 1, 2024. Dr. John Schommer retired on July 31, 2024. Dr. Ezra Nance joined the department on August 1, 2024, as a lecturer. The ABCD crew, Dr. Amanda Niedzialomski, **B**arbara Kunkel, Carlin Bush, and **D**ana Gatewood, have secured MAA funding to support the

Math Craft Laboratory (MCL) for a second year. During the 2023-2024 academic year 25 female high school students participated. The activities of the MCL culminated with an open house on April 12, 2024, where the participants demonstrated crafts they had made and displayed posters on what they learned to UTM faculty, their own parents, their high school teachers, and members of the public. With the generous support of the MAA, this fantastic program will continue through 2024-2025.

#### CALL FOR NOMINATIONS FOR THE MAA Online OF HARA-SE AWARD FOR DISTINGUISHED TEACHING BY A BEGINNING COLLEGE OR UNIVERSITY MATHEMATICS FACULTY MEMBER

#### **COMPLETE NOMINATION PROCESS**

Nominations for the 2025 Southeastern Section Award for Distinguished Teaching by a Beginning College Mathematics Faculty Member are now being accepted.

Brief Description: The MAA Southeastern Section (MAA-SE) established this award to honor beginning college or university faculty whose teaching in the Section has been extraordinarily successful and whose effectiveness in teaching undergraduate mathematics is shown to have influence beyond their own classrooms. An awardee must have taught full time in a mathematical science in the Southeastern Section for at least two years, but not more than a total of seven years in any collegiate institution. Each year at most one college or university teacher is to be honored with this MAA-SE section award. The recipient of this award will serve on the MAA-SE Teaching Award Selection Committee for three years, chairing the committee in the third year.

Nominations for the award may be made by any member of the MAA-SE section. A complete nomination packet should consist of a nomination form, a narrative, additional documentation, and letters of recommendation as described below. Please email the completed packet by **January 23, 2025** to:

Vicky Kilma

Appalachian State University <u>klimavw@appstate.edu</u>

Questions may be directed to Vicky.

#### Eligibility and Guidelines for Nomination

Eligibility: Teaching is intended to include classroom instruction as well as activities outside the classroom, such as working with student groups, preparing students for mathematical competitions, directing undergraduate students in research in mathematics, directing students in the preparation of honors theses, preparing teaching materials used by others, etc. Nominees must:

- Hold the terminal degree required by SACS to be a full-time faculty member in a collegiate institution, did very little or no teaching (e.g. three semester courses a year or less), and
- Hold membership in the Mathematical Association of America



Nominees should, in the context of their institution:

Be recognized as extraordinarily successful in their teaching Have effectiveness in teaching undergraduate mathematics that can be documented Have had influence in their teaching beyond their own classrooms

Nomination Packet: We require the same materials for nomination as the <u>Henry L. Alder award</u>. A nomination for this award should consist only of the materials requested below, and should not include any other materials, such as curricula vitae or other items.

Nomination Form: Complete and include the <u>nomination form</u> as the initial page of the nomination packet. A hard copy of the form can be found in the following section of this newsletter.

- Narrative: Describe the nominee's extraordinary success in teaching by providing a narrative of the nominee's background, experience, teaching style, special contributions, other teaching awards, and any additional evidence of the nominee's unusual achievement in teaching. Note especially effective teaching in undergraduate mathematics and influence beyond the nominee's own classrooms. The narrative should be single-spaced in 12 pt font with at least 3/4-inch margins and should not exceed 2 pages.
- Additional Documentation: Submit <u>no more than two pages</u> of further evidence to document the nominee's extraordinary teaching success. This documentation will vary greatly from institution to institution, but may include summaries of peer or student evaluations, comments on teaching, possible increases in numbers of majors in mathematics (with clear evidence of the nominee's substantial responsibility for them), possible student success in mathematics competitions (with clear evidence of the nominee's substantial responsibility for them), success in research in undergraduate mathematics conducted by undergraduate students under the direction of the nominee, development of curricular materials successfully used by colleagues, adoption of the nominee's teaching methods or techniques by experienced colleagues, service as a respected adviser for a student group, etc. Nominators should bear in mind that the selection committee might view a nomination more positively if it is accompanied not just by carefully chosen testimonials from a few selected students and faculty, but also by reports, comments, and criticism which is representative of the whole spectrum of opinion among students and faculty on the nominee's teaching.

Letters of Recommendation: Include no more than five letters of recommendation, not exceeding one page each, as follows:

- Two letters from the nominee's present or former students.
- Two letters from the nominee's colleagues (one of whom could be the department chair).
- One additional letter from any one qualified to comment on the nominee's extraordinary teaching success.

OF AMERICA	<u>MAASE Award for Distinguished Teaching by a Be- ginning College or University Mathematics Faculty</u> <u>Member</u> NOMINATION FORM <i>To be submitted by January 23, 2025</i>
MAA	-SE Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member NOMINATION FORM To be submitted by January 23, 2025
Nominee	Information
Name (first	name first):
-	Jniversity Affiliation:
College or U	Jniversity Address:
City, State,	ZIP:
Email addres	۶ <u> </u>
Number of	years teaching experience in a mathematical science:
Terminal de	gree Date received Specialty
Institution	granting terminal degree:
	nee has held their terminal degree for more than 7 years, indicate activities for e nominee was not teaching:
departm leave or	o verify that the nominee has taught at least half time in a mathematical science ent during the current academic year or during the previous year if on approved sabbatical. for Information
romma	or mormation
Name (first	name first):
Address:	
• • • • •	ZIP:
	Email:
Nominator	5 Signature: Date:

### CALL FOR NOMINATIONS: THE 2024 SOUTHEASTERN SECTION DISTINGUISHED TEACHING AWARD

Nominations for the 2025 Southeastern Section Distinguished Teaching Award are now being accepted.

Brief Description: This award is established to honor faculty who have been extraordinarily successful in their teaching and who have had influence beyond their own institutions through their teaching. Each year at most one college or university teacher is to be honored with this MAA-SE section award. Nominations for the award may be made by any member of the MAA-SE section. A complete nomination packet should consist of a nomination form, a narrative, additional documentation, and letters of recommendation as described below. Please email the completed packet by January 23, 2025 to:

Vicky Klima Appalachian State University klimavw@appstate.edu

Questions may be directed to Vicky.

Eligibility and Guidelines for Nomination

Eligibility: Teaching is intended to include classroom instruction as well as activities outside the classroom, such as working with student groups, preparing students for mathematical competitions, directing undergraduate students in research in mathematics, directing students in the preparation of honors theses, preparing teaching materials used by others, etc.

Nominees must:

Be college or university teachers who teach mathematical science courses at least half-time during the academic year in the Southeastern Section. Those on approved leave (sabbatical or other) during the academic year in which they are nominated qualify if they fulfilled the requirements the previous year. Have more than seven years of experience in teaching mathematical sciences. Hold membership in the Mathematical Association of America.

Nominees should, in the context of their institution:

Be widely recognized as extraordinarily successful in their teaching Have effectiveness in teaching undergraduate mathematics that can be documented Have had influence in their teaching beyond their institutions through their teaching Have increased participation and advancement in mathematics and higher education especially by members of communities marginalized by systemic discrimination.

Nomination Packet: We require the same materials for nomination as the Deborah and Franklin Tepper Haimo Award. A nomination for this award should consist only of the materials requested below, and should not include any other materials, such as curricula vitae or other items. Nomination Form: Complete and include the nomination form as the initial page of the nomination packet. A hard copy of the form can be found in the following section of this newsletter.

Narrative: Describe the nominee's extraordinary success in teaching by providing a narrative of the nominee's background, experience, teaching style, special contributions, other teaching awards, and any additional evidence of the nominee's unusual achievement in teaching. Note especially effective teaching in undergraduate mathematics and influence beyond the nominee's own classroom. The narrative should be single-spaced in 12 point font with at least 3/4 inch margins and should not exceed 2 pages.

- Additional Documentation: Submit <u>no more than two pages</u> of further evidence to document the nominee's extraordinary teaching success. This documentation will vary greatly from institution to institution, but may include summaries of peer or student evaluations, comments on teaching, possible increases in numbers of majors in mathematics (with clear evidence of the nominee's substantial responsibility for them), success in research in undergraduate mathematics conducted by undergraduate students under the direction of the nominee, development of curricular materials successfully used by colleagues, adoption of the nominee's teaching methods or techniques by experienced colleagues, service as a respected adviser for a student group, etc. Nominators should bear in mind that the selection committee might view a nomination more positively if it is accompanied not just by carefully chosen testimonials from a few selected students and faculty, but also by reports, comments, and criticism which is representative of the whole spectrum of opinion among students and faculty on the nominee's teaching.
- Letters of Recommendation: Include no more than five letters of recommendation, not exceeding one page each, as follows:

Two letters from the nominee's present or former students.

Two letters from the nominee's colleagues (one of whom could be the department chair).

One additional letter from any one qualified to comment on the nominee's extraordinary teaching success.

#### **Previous Teaching Award Recipients:**

The section has presented the Award for Distinguished College or University

Teaching of Mathematics each year since 1992. The recipients since 2000 are:

- 2000 Theodore Shifrin, University of Georgia
- 2001 Johnny Henderson, Auburn University
- 2002 Ronald Harshbarger, University of South Carolina, Beaufort
- 2003 Sue E. Goodman, University of North Carolina, Chapel Hill
- 2004 Jeff R. Knisley, East Tennessee State University
- 2005 David Stone, Georgia Southern University
- 2006 William "Mac" Priestly, the University of the South
- 2007 David Sumner, University of South Carolina, Columbia
- 2008 Ronald Gould, Emory University
- 2009 Hugh Howards, Wake Forest University
- 2010 Martin Jones, University of Charleston
- 2011 Barry Spieler, Birmingham-Southern College
- 2012 Sam Kaplan, University of North Carolina at Asheville
- 2013 Ron Taylor, Berry College
- 2014 No award given
- 2015 Maurice Hendon, University of Georgia
- 2016 Stephen Robinson, Wake Forest University
- 2017 Valerie Miller, Georgia State University
- 2019 Julia Barnes, Western Carolina University
- 2020 Ratnasingham Shivaji, University of
- 2021 Tim Chartier, Davidson College
- 2022 Vicky Kilma, Appalachian State University
- 2023 Geneva Clark, University of Tennessee

MAA-SE Distinguished Teaching Award NOMINATION FORM         To be submitted by January 23, 2025         Nominee Information         Name (first name first):	MAA-SE Distinguished Teaching Award NOMINATION FORM To be submitted by January 23, 2025         Mominee Information         Name (first name first):         College or University Affiliation:         Diversity Address:         College or University Address:         Mumber of years teaching experience in a mathematical science:         Check to verify that the nominee has taught at least half time in a mathematical science department during the current academic year or during the previous year if on approved leave or sabbatical.         Nominator Information         Mane (first name first):	AMERICA	<b>MAASE Distinguished Teaching Award</b> <b>NOMINATION FORM</b> <i>To be submitted by January 23, 2025</i>
Name (first name first):	Name (first name first):		NOMINATION FORM
College or University Affiliation: College or University Address: City, State, ZIP: Number of years teaching experience in a mathematical science: Check to verify that the nominee has taught at least half time in a mathematical science department during the current academic year or during the previous year if on approved leave or sabbatical. Nominator Information Name (first name first): Address: City, State, ZIP: Telephone Email:	College or University Affiliation: College or University Address: City, State, ZIP: Number of years teaching experience in a mathematical science: Check to verify that the nominee has taught at least half time in a mathematical science department during the current academic year or during the previous year if on approved leave or sabbatical. Nominator Information Name (first name first):	Nominee Informat	tion
College or University Affiliation: College or University Address: City, State, ZIP: Number of years teaching experience in a mathematical science: Check to verify that the nominee has taught at least half time in a mathematical science department during the current academic year or during the previous year if on approved leave or sabbatical. Nominator Information Name (first name first): Address: City, State, ZIP: Telephone Email:	College or University Affiliation: College or University Address: City, State, ZIP: Number of years teaching experience in a mathematical science: Check to verify that the nominee has taught at least half time in a mathematical science department during the current academic year or during the previous year if on approved leave or sabbatical. Nominator Information Name (first name first):	Name (first name first):	
City, State, ZIP:	City, State, ZIP:		
Number of years teaching experience in a mathematical science:         Check to verify that the nominee has taught at least half time in a mathematical science department during the current academic year or during the previous year if on approved leave or sabbatical.         Nominator Information         Name (first name first):         Address:         City, State, ZIP:         Telephone       Email:	Number of years teaching experience in a mathematical science:         Check to verify that the nominee has taught at least half time in a mathematical science department during the current academic year or during the previous year if on approved leave or sabbatical.         Nominator Information         Name (first name first):         Address:         City, State, ZIP:         Telephone       Email:	College or University Add	tress:
Check to verify that the nominee has taught at least half time in a mathematical science department during the current academic year or during the previous year if on approved leave or sabbatical. Nominator Information Name (first name first):	Check to verify that the nominee has taught at least half time in a mathematical science department during the current academic year or during the previous year if on approved leave or sabbatical. Nominator Information Name (first name first):	City, State, ZIP:	
department during the current academic year or during the previous year if on approved leave or sabbatical. Nominator Information Name (first name first):	department during the current academic year or during the previous year if on approved leave or sabbatical. Nominator Information Name (first name first):	Number of years teaching	g experience in a mathematical science:
Name (first name first): Address: City, State, ZIP: Telephone Email:	Name (first name first): Address: City, State, ZIP: Telephone Email:	department during the	he nominee has taught at least half time in a mathematical science e current academic year or during the previous year if on approved
Address:City, State, ZIP: TelephoneEmail:	Address: City, State, ZIP: Telephone Email:	Nominator Inform	ation
City, State, ZIP: Telephone Email:	City, State, ZIP: Telephone Email:	Name (first name first):	
Telephone Email:	Telephone Email:	Address:	
		City, State, ZIP:	
Nominator's Signature: Date:	Nominator's Signature: Date:	Telephone	Email:
		Nominator's Signature:	Date:

#### CALL FOR NOMINATIONS: THE 2025 SOUTHEASTERN SECTION DISTINGUISHED SERVICE AWARD

The Southeastern Section of the MAA is delighted to present a Distinguished Service Award at its annual Spring Meeting each year. Any member of the Section who is an outstanding contributor to our Section is eligible for nomination. The person selected for 2025 will be honored at our Section's Meeting.

The Section Distinguished Service Award Committee encourages members of the Section to nominate deserving persons for this award. Please send your nomination letter, along with the nominees' vitae (if possible) and any other supporting materials/letters, all as electronic documents, to Catherine Matos, Committee Chair, at cmatos@clayton.edu by January 13, 2025. We ask that you make every effort to gather these materials without the nominee's knowledge, as it is the Section's tradition to surprise the awardee with the award at the Section meeting. Previous nominations of candidates who were not awardees may be carried forward for consideration for the 2025 award if the nominator notifies Catherine Matos by the submission deadline. The winner will be expected to serve on the MAA-SE Service Award Committee for 3 years after receiving the award, chairing the committee in the last year. Contact the Committee Chair regarding any questions about the process or nominating materials.

The Section Award was made in even numbered years from 1990 to 1996 and annually since that time. The following is a list of recipients since 2000:

March 2000 Tina Straley, MAA Executive Director March 2001 Charles Cleaver, The Citadel March 2002 Sharon Cutler Ross, Georgia Perimeter College March 2003 Sylvia Trimble Bozeman, Spelman College March 2004 Theresa E. Early, Appalachian State University March 2005 Hugh Haynesworth, College of Charleston March 2006 Stephen Davis, Davidson College March 2007 Joel Brawley, Clemson University March 2008 Benjamin G. Klein, Davidson College March 2009 Walter M. Patterson, III, Lander University March 2010 Ray E. Collings, Georgia Perimeter College March 2011 Ellen Kirkman, Wake Forest University March 2012 Charlotte Knotts-Zides, Winthrop University Wofford College March 2013 Jim Vandergriff, Austin Peay State University March 2014 John C. Mayer, University of Alabama, Birmingham March 2015 Jeff Clark, Elon College March 2016 Martha Abell, Georgia Southern University March 2017 Virginia Watson, Kennesaw State University March 2018 Pat Humphrey, Georgia Southern UNiversity March 2019 Julia Barnes, Western Carolina University March 2020 Jeff Kinsley, East Tennessee State University March 2021 Emily Hynds, Samford University March 2022 Catherine Matos, Clayton State University March 2023 Ron Taylor, Berry College

#### One Hundred and Fourth Annual Meeting Mathematical Association of America, Southeastern Section High Point University

## MAA Southeastern Section 2025 Annual Meeting, Call for Contributed Papers and Posters:

The officers of the Southeastern Section of the MAA invite the submission of titles and abstracts for 15-minute contributed papers in all areas of mathematics by college and university faculty, graduate students, undergraduate students, and others to be presented at our 104th annual meeting Thursday, February 27 to Saturday, March 1 at High Point University in High Point, NC. As the Section has declared since its beginning, "Anyone Interested in Mathematics Is Invited to Attend."

Abstract submissions can be made through <u>ScholarLattice</u>. The abstract submission deadline is **Monday**, **January 27**, **2025**; presenters will be notified of acceptance by Wednesday, February 5 (before the early bird registration deadline for the meeting). Talks will be scheduled in concurrent sessions and organized by the general mathematical area as indicated by the abstract.

In addition to general contributed paper sessions and sessions for undergraduate student presentations, there will be several special sessions on selected mathematical topics. They are:

My Favorite Contest Problems Promoting Data Literacy Recreational Mathematics Undergraduate Research from the Mentor's Perspective Unspoken History of Mathematics

We will also offer three workshops on Friday morning. They are:

#### Beyond the PhD: A Career at PUIs

Liberal Arts Math, Quantitative Literacy, College Algebra/Precalculus: A Novel Hybrid Curriculum

Strategies for Targeting and Assessing Conceptual Understanding in Undergraduate Mathematics

Descriptions of all special sessions and workshops can be found on the abstract submission website and in the Southeastern Section community on <u>MAA Connect</u>. Full meeting registration details and local information will be available after the first of the year.

Undergraduate Poster Session: Students are encouraged to present research and results of special projects in poster format. The session is scheduled for Saturday morning, concurrent with contributed talks. Abstracts should be submitted through the conference website no later than Monday, January 27, 2025. Poster presenters will be provided with a tripod, posterboard, and binder clips. Printed posters can be any size, but 48" x 36" is the most common. Appropriate content for a poster includes, but is not limited to, a new result, a new proof of a known result, a new mathematical model, an innovative solution to a Putnam problem, or a method of solution to an applied problem. Contact organizer Shalmali Bandyopadayayay (sbandyo5@utm.edu) if you need additional information.

**Math Jeopardy Contest:** Teams of three or four undergraduates will compete in a mathematical version of the well-known answer-and-question game. Competition is limited. There is a \$25.00 registration fee for each team. *This fee can be paid with the sponsor's meeting registration.* Topics will include calculus (single and multivariable), linear algebra, differential equations, and discrete mathematics. The preliminary rounds for Math Jeopardy will be scheduled for Friday morning from 8:00 a.m. to 12:00 noon. To register team members so their names may be included in the program, or to find out more, contact Ron Taylor (<u>rtaylor@berry.edu</u>) or Karen O'Hara (<u>kohara@highpoint.edu</u>). The registration deadline is **Monday, January 27, 2025..** *There is a limit of 36 teams; schools will be initially limited to one team. If fewer than 36 teams register by the deadline, schools may register additional teams.* 

**Project NExT-SE:** Project NExT-SE (New Experiences in Teaching) is the Southeastern MAA Section's version of the national program for new and recent Ph.D.s in mathematical sciences interested in improving the learning and teaching of undergraduate mathematics. All national and section Project NExT fellows are invited to attend! Activities are planned for Thursday afternoon and Friday morning. Contact Deedra Coleman (colemanda@wofford.edu ) for more information.

**Treasure Hunt**: On Thursday evening (February 27, 2025), there will be a Mathematics Treasure Hunt for students and their advisors. Students will use mathematics to solve clues and look for a "treasure." This is a fun, non-competitive event that will give students an opportunity to meet and work with students from other colleges and universities. Check-in is between 7:00 p.m. and 7:30 p.m. with the event starting at 7:30 p.m. It is also greatly appreciated if math club advisors would be willing to help with this event. If you have any questions or would like to volunteer to help, please contact Karen O'Hara (kohara@highpoint.edu)

Section Awards: The Southeastern Section will <u>give three awards</u> at the Spring 2025 meeting: the Distinguished Teaching Award, the Distinguished Teaching Award by a Beginning College or University Mathematics Faculty Member, and the Distinguished Service Award. We invite nominations for the service award through January 13, 2025 and for the teaching awards through January 23, 2025. Information about the awards can be found on the <u>MAA-SE</u> <u>website</u>. Please email teaching award nominations or questions to Vicky Klima (<u>klimaw@appstate.edu</u>). Service award nominations or questions should go to Catherine Matos (<u>CatherineMatos@clayton.edu</u>).

**Graduate School and Career Fair:** In this venue, students considering graduate school in mathematical sciences have opportunities to meet with representatives of various graduate programs. In addition, those seeking jobs in industry, business, or government in the mathematical sciences can meet with potential employers. Faculty mentors are also welcome. Pizza will be served free to students, and a raffle will be held for students visiting the exhibits. For those exhibiting, the \$25 table fee can be paid through the conference website. Representatives of graduate programs and businesses should contact Karen O'Hara (kohara@highpoint.edu) for more information.

**Math T-shirt contest**: The best mathematics t-shirt at the meeting will be recognized with an announcement, a certificate, and a featured picture in the fall newsletter. Get your Math Club organized now for a great t-shirt in the spring.

**Exhibits:** On Friday afternoon and Saturday morning, representatives of publishing companies and other vendors will have exhibits in the lobby of the Connell Student Center.

#### Section Committee and Officer Nominations

We also seek nominations for <u>MAA-SE committees and office positions</u>. Positions to be filled this year are Vice Chair for Programs, Vice Chair for Two-Year Colleges, Student Activities Coordinator, Section Lecturer, AL and GA State Directors, Historian, Webmaster, and NExT-SE Co-Director. Please send any nominations or questions to the current Chair of the Nominations Committee, George Lytle (<u>glytle@montevallo.edu</u>) or to your state director.

<b>Registration Fees</b>	Pre-registered	After February 10, 2025
Faculty	\$40	\$60
College/University Students	\$20	\$30
Emeritus Faculty	\$20	\$30
High School Teachers	\$20	\$30
High School Students	\$20	\$30
Workshops	Free but pre-registration is re- quired	Free

**Pre-Registration:** Pre-registration for the meeting through the conference website https:// maasoutheastern.org/2025-section-meeting/ is encouraged; On-site registra.on and materials pick up will be available; for .mes, see the conference website.

#### MAA-SE 2025 Workshop Abstracts:

## Liberal Arts Math, Quantitative Literacy, College Algebra/Precalculus: A Novel Hybrid Curriculum

Organizer: Dan Kalman, American University (Retired) (dan@dankalman.net)

Abstract: This workshop will present an innovative curriculum that is a hybrid of the standard courses mentioned in the title. The mathematical focus is on discrete models defined by difference equations, and the continuous models that they reveal. The goal is to give students a realistic sense of how math actually gets applied. At the same time, the development and exploration of these models is an effective vehicle for having students review many of the ideas from standard college algebra courses.

The presentation will follow this outline:

- Motivation for the course: dissatisfaction with standard curricular options.
- Principles underlying the curricular design.
- Progression of mathematical ideas from arithmetic to logistic growth, climaxing with a new discrete version of logistic growth.
- Pedagogy; Instructional approaches.
- Technology. Available suite of excel-based exploratory tools.
- Experiences of teachers using this curriculum.

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#### Beyond the PhD—A Career at PUIs

Organizers: Shalmali Bandyopadhyay, The University of Tennessee at Martin (sbandyo5@utm.edu); Dustin Nichols, High Point University (dnichols@highpoint.edu) Abstract: Unlike larger research universities, primarily undergraduate institutions (PUIs) are smaller, privately or publicly funded colleges and universities offering unique resources and research experiences. As a PUI faculty member, your responsibilities are multifaceted, including substantial teaching commitments, typically ranging from six to eight courses per year. Join us for an inspiring workshop showcasing exceptional faculty members from Primarily Undergraduate Institutions (PUIs) who excel in teaching, research and service. Hear from educators at various career stages as they share insights and strategies for success. The speakers will be:

- 1. Blake Dunshee, Belmont University, on the integration fo cutting-edge active learning pedagogies to enhance student engagement, retention, and overall academic success.
- 2. Jason Devito, University of Tennessee at Martin, on effective interdisciplinary undergraduate research advising and securing external funding.
- 3. Nicole Panza, Francis Marion University, on navigating through university committees, departmental responsibilities, discipline-related opportunities and communityfocused outreach, promoting mathematics awareness and education beyond academia.

## Strategies for Targeting and Assessing Conceptual Understanding in Undergraduate Mathematics

Organizers: Hwayeon Ryu, Elon University (<u>hryu@elon.edu</u>); Aaron Trocki, Elon University, (<u>atrocki@elon.edu</u>)

Abstract: Research on teaching and learning in introductory mathematics courses has identified a need to address underpinning concepts during instruction and on assessments. Faculty teaching these courses are challenged with addressing a plethora of learning objectives in a limited amount of time, which may lead to a focus on lower levels of cognitive demand. All students deserve opportunities to develop their understanding of foundational concepts in mathematics. This workshop highlights innovative practices designed to foster and effectively assess conceptual understanding. We will showcase strategies recently implemented in Calculus I courses that include developing classroom routines to explain concepts; emphasizing application questions; and revising assessments for higher cognitive demand.

#### MAA SE 2025 Special Session Abstracts:

#### **My Favorite Contest Problems**

Organizers: Carl Yerger, Davidson College (<u>cayerger@davidson.edu</u>); Doug Ensley, MAA (<u>densley@maa.org</u>)

*Abstract:* Join problem solving enthusiasts, including leadership of some of the MAA AMC editorial boards as they share their favorite problems from past AMC competitions. Participants will share their perspective on writing and selecting problems for the AMC exams as well as other local mathematical contests and programs.

#### **Promoting Data Literacy**

*Organizers:* Nicole Panza, Francis Marion University (<u>npanza@fmarion.edu</u>); Amanda Mangum, Converse University (<u>amanda.mangum@converse.edu</u>)

*Abstract:* Data is now everywhere, in every field. In order for students to be competitive in the ever-data-dependent job market, they need to have basic skills associated with collecting and interpreting data. This can take many different forms at different institutions, from Data Science courses to Statistics to Computer Science and Computational Chemistry. Mathematics Departments are often tasked with building new courses to bolster both evolving general education programs and major-level courses supporting the modern interests of applied students. This session is focused on how different departments have faced this challenge to give faculty ideas of how they might also join the effort to equip students with data literacy skills.

#### **Recreational Mathematics**

*Organizers:* Timothy Goldberg, Lenoir-Rhyne University (<u>timothy.goldberg@gmail.com</u>); ron taylor, Berry College (<u>rtaylor@berry.edu</u>)

*Abstract:* "Recreational mathematics is inspired by deep ideas that are hidden in puzzles, games, and other forms of play." (Robert Vallin, quoted in "Three New SIGMAAs Formed", by Jacqueline Jensen-Vallin, MAA Focus Vol. 38, No. 2, April/May 2018.) The field of recreational math includes a startling variety of mathematical ideas and strategies, and tends to be especially entertaining and accessible. (And they make wonderful examples and research projects for students!) This session is devoted to talks related to recreational math, in any of its myriad forms!

#### **Undergraduate Research from the Mentor's Perspective**

Organizers: Breeanne Swart, The Citadel (<u>bbaker2@citadel.edu</u>); Antara Mukherjee, The Citadel (<u>mukherjeea1@citadel.edu</u>)

*Abstract:* This session seeks to contribute to the conversation of mentoring undergraduate research in all of its forms. Proposals topics can include, and are not limited to, descriptions of projects worked on with students, unique techniques for working with students, how you determine which students are a good fit for your projects, and what your expectations are of students given a variety of factors such as length of project (semester, year, summer, etc), academic commitments, personal commitments, etc.

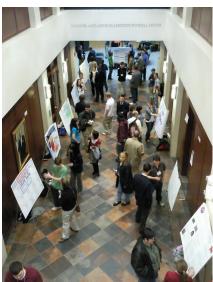
#### **Unspoken History of Mathematics**

*Organizers:* Zachery Keisler, Saluda High School, Saluda, SC (<u>zkeisler@saludaschools.org</u>); Josie Ryan, Lander University (<u>pryan@lander.edu</u>)

*Abstract:* Anyone who has taken a history of mathematics course can describe in great detail how the ancient Greeks' primary contribution to mathematics was the development of formal geometry and how Isaac Newton and Gottfried Wilhelm Leibniz are the founders of calculus. However, very few people who take a history of mathematics course will be able to describe how the ancient Babylonians helped in the development of trigonometry or describe how in the late 1970s to the early 1980s Graciela Beatriz Salicrup López became a pioneer in the field of categorical topology.

The special session on unspoken history of mathematics will help shine a light on different cultures and historical figures that normally might not be covered in a traditional history of mathematics courses. Attendees to the Unspoken History of Mathematics will not only participate The special session on unspoken history of mathematics will help shine a light on different cultures and historical figures that normally might not be covered in a traditional history of mathematics courses. Attendees to the Unspoken History of Mathematics will not only participate in talks that help shine a light on different cultures and historical figures but also help in revamping history of mathematics courses by creating units or projects that delve into the history of mathematics beyond western Europe to help students understand how diverse and rich the history of mathematics truly is.

## Student Activities MAA SE Section Meeting February 27-March 1, 2025



### **Undergraduate Student Research Posters and Talks** Poster Session Saturday morning Talks throughout meeting

Present your research in a talk or with a poster. Abstracts for talks and posters can be submitted through the meeting web site. Prizes will be awarded for best talks and posters.

## **Graduate School & Career Fair** Friday noon

Is graduate school in your future? Need a job? Meet with representatives of graduate programs and employers.

- Pizza lunch (free for students)
- Networking
- Door prize raffle for students

### **Distinguished Lectures for Students** Friday morning

Anne Duffee, Sewanee, 2024 Section Distinguished Teaching Award Recipient



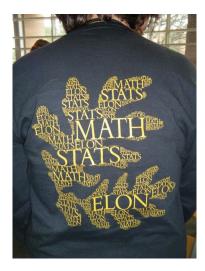
**Dr. Hwayeon Ryu**, Elon University, 2024 Section Teaching Award for Beginning Faculty Recipient.

## Math Jeopardy Preliminary and semifinal rounds Friday morning

### Finals Saturday noon

Teams of 3-4 undergraduate students compete in this classic game, with clever questions (oops, answers) from calculus and other courses in the first two years of the mathematics curriculum. Register in advance by contacting Ron Taylor (<u>rtaylor@berry.edu</u>)





## **Math T-shirt Contest**

Show off your geek chic. A prize will be awarded to the undergraduate math club or Jeopardy team with the best mathematically-themed T-shirt. All Jeopardy teams will be considered automatically. Other groups can register for the contest by contacting Karen O'Hara (kohara@highpoint.edu).

### **Treasure Hunt** Thursday evening

Arrive early to the meeting for fun activities and mathematical puzzles. Meet students from all over the Southeastern Section of the MAA. Contact Karen O'Hara (kohara@highpoint.edu) to participate.



## **SOUTHEASTERN SECTION OFFICERS 2024-2025**

Chair:	Caroline Maher-Boulis (cmaherboulis@leeuniversity.edu)
Vice-Chair For Two-Year Colleges:	Jimmy Miller (millerje4@roanestate.edu)
Secretary:	Frank Patane (fpatane@samford.edu)
Treasurer:	Tom Fitzkee (TFitzkee@FMarion.edu)
Section Representative:	Emily Hynds (knottszidesca@wofford.edu)
Vice Chair of Programs:	Andy Miller (andrew.miller@belmont.edu)
Char Elect:	Ron Taylor (rtaylor@berry.edu)
Section Lecturer:	Jeneva Clark (dr.jenevaclark@utk.edu)
Newsletter Editor:	Antara Mukherjee (antara.mukherjee@citadel.edu)
Student Activities Coordinator:	Karen O'Hara (kohara@highpoint.edu)
State Director of Alabama:	Tricia Phillips (tphilli2@uab.edu)
State Director of Georgia:	Christopher Raridan (christopherraridan@clayton.edu)
State Director of North Carolina:	Megan Powell (mpowell4@unca.edu)
State Director of South Carolina:	Denise Rangel-Tracy (rangel.tracy@fmarion.edu)
State Director of Tennessee:	Kelly Buch (buchk@apsu.edu)
Webmaster:	Brad Fox (foxb@apsu.edu)
Historian:	Naser Al-Hasan (naser.alhasan@newberry.edu)
Directors of Project NeXt-SE:	Deidra Coleman, Jesse Hamm, and Sarah Eskew (colemanda@wofford.edu, hammj@winthrop.edu, and sarklock@utsouthern.edu, respectively).

MAA SOUTHEASTERN SECTION COMMITTEES
<u>2024-2025</u>

 Section Teaching Award: Vicky Klima,(Chair) Jeneva Clark Anne Duffee All State Directors
 Section Service Award: Catherine Matos (Chair) Ron Taylor Karen O'Hara John Mayer Rigoberto Florez Kelly Buch Justin Allman

Nominations Committee:

George Lytle (Chair) Christopher Raridan Tim Goldberg John Kirby Anant Godbole

Site Selection:

TBA

Southeastern Section MAA Website http://sections.maa.org/southeastern/maase/