Pitt State Mathematics and Physics Newsletter

Issue 2024-2025

Pittsburg State University
College of Arts and Sciences

Major Numbers:

The number of math majors is 26 undergraduate and 2 graduate students, There are 63 undergraduate computer science majors. The number of physics majors is 10 undergraduate and 2 graduate students. There are 20 graduate Material Science students..

Inside this Issue:

News from the Chair

As you browse this newsletter you can see we had another banner year. It is through the diligent work of Dr. Cynthia Huffman that we have this awesome annual newsletter to keep all of you updated on the activities of the department.

With so many things going on I don't even know where to begin so I guess I will go chronologically (for the most part) through the departmental happenings. The fall semester was rather quiet as usual. We had our traditional Fall Picnic and Christmas Party. It is always great to see some of our friends that we have not seen for a while. Math Honor Day in October was a huge success with near record attendance. Guest speaker was Lindsey Gaffney, a meteorologist at KOAM TV. Even though she is not a math major or a Gorilla, we were happy to have Lindsey talk about how mathematics plays a huge role in her career.

Spring was a busier time for us. Students and faculty attended the KME National convention in Kirksville Missouri and the Kansas Section Meeting of the MAA in Emporia. Our Math Relays and Science Day activities were both extraordinarily successful. We capped off the year with our departmental Honors Banquet where we recognized the Math, Physics, and Computer Science scholarship recipients.

We also continue to have changes in our faculty. Mrs. Terry Martin completed her phased retirement this spring and is now fully retired. Dr. Tadek Dobrowolski will complete his phased retirement this fall and retire in December. We wish them both the best as they transition into this next phase of their lives. Dr. Yaping Liu has a couple more years in his phased retirement.

We are excited to be able to increase our Computer Science faculty to keep up with the burgeoning program. This fall Ms. Naga Chaitanya Dodda will be joining Dr. Jackson Samuel Ravindran who took the helm of the Computer Science program last fall.

Also, I would like to welcome Dr. Margaret Mohr-Schroeder back to Kansas! We take great pride in Margaret and wish her all the best as the Vice Provost of Academic Affairs and Innovation at Kansas State University.

Finally, I would like to highlight a new scholarship opportunity for Math majors, the $0 Tuition and Fees for Highly Qualified Math Majors Scholarship. The University has recently implemented the Great Gorilla Scholarship for incoming freshmen. This scholarship has five different levels. For Level 1, the highest level, which requires a 3.95 or higher high school GPA, or a 28 or higher ACT score, the University will award $4,000 per year for up to 4 years. For Math majors qualifying for the Level 1 Great Gorilla Scholarship with a math ACT of 27 or higher the department will award an additional $4,400 per year for up to 4 years. These two combined cover the entire cost of current in-state tuition and campus fees. We are very excited by this program and the caliber of students it will bring to the department.

I hope my comments here highlight a few of the events you will read about in the remainder of this newsletter. As we share the news from within the department, we would love to hear from you as well. If you have any news about happenings in your life, please feel free to let us know so we can pass the word on to others. We would welcome a visit from you if you ever happen to be back in Pittsburg.

Join us on Facebook:

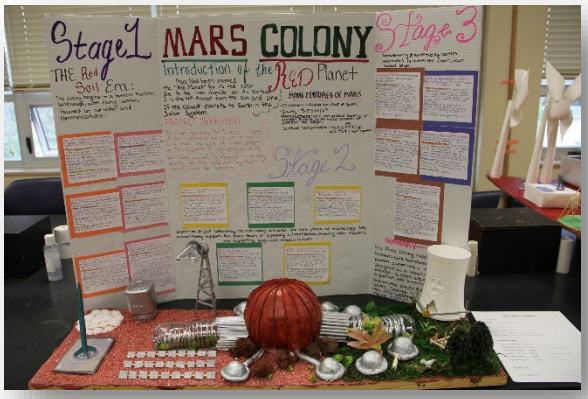
Pittsburg State University Department of Physics

and/or at

Pitt State (Kansas) Math Alumni

Physics Participates in Science Day

On April 24, 2025, Physics participated along with Biology and Chemistry in the annual Science Day. High school students had the opportunity to participate in a series of challenging individual and team events designed to showcase their skill and knowledge in a fun and friendly environment. More information, including a list of winners can be found at https://www.pittstate.edu/artsci/science-day/index.html . Pictures below are from the event. Photo credits to Angelyn Hobson (paper towers photos) and Dr. Rebecca Butler.



GET INVOLVED

Want to help students attend conferences? Contact Dr. Tim Flood (tflood@pittstate.edu) for information about supporting student travel.

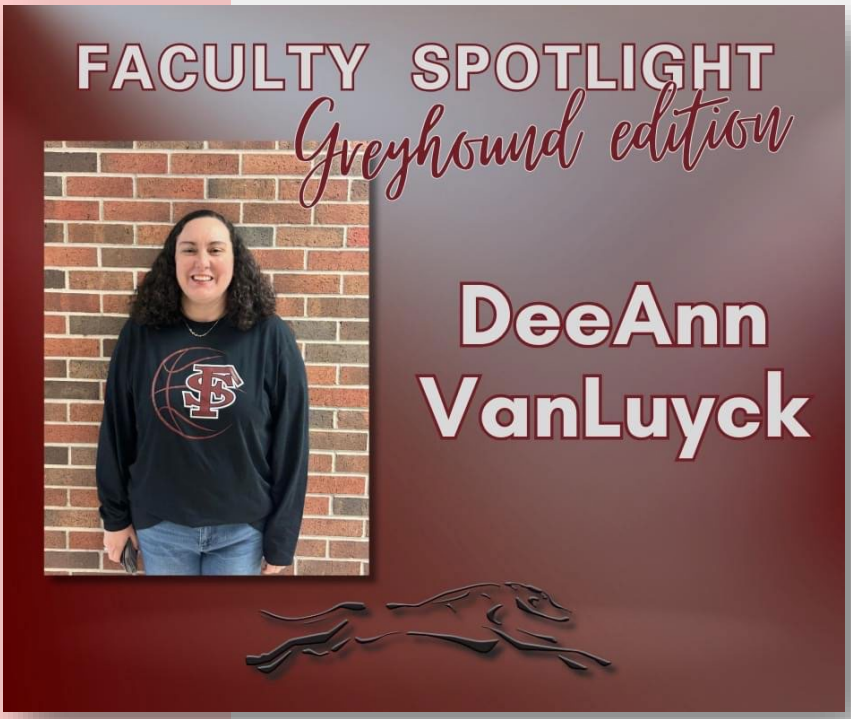
New Computer Science Faculty Member Hired

Dr. Ravindran (photo from the Marcu Laboratory, College of Engineering, UC Davis).

To support the new Computer Science degree offered by the Department of Mathematics and Physics, Dr. Jackson Samuel Ravindran was hired and began as an assistant professor in the Fall 2024 semester. In the fall, Dr. Ravindran taught Web Application Development I, Mobile Application Development, and Introduction to Front End Frameworks. During the spring semester, he taught Web Application Development II, Principles of Software Architecture, and Advanced Programming.

Dr. Ravindran comes to PSU from the University of California, Davis, where he served as a Postdoctoral Research Fellow. Prior to that he worked as a Research Fellow in the Department of Imaging Physics at the University of Texas MD Anderson Cancer Center, United States and as a Postdoctoral Researcher and Associate Lecturer in the Faculty of Technology, Design and Environment in the Oxford Brookes University, Oxford, UK. He received a Doctor of Philosophy from the Vellore Institute of Technology, India and received his Master's and Bachelor's degree in Computer Science and Engineering from Anna University, India.

Alumna Recognized by Fort Scott Community College



Gorilla DeeAnn VanLuyck was recently recognized with a Faculty Spotlight from Fort Scott Community College for "truly remarkable" "dedication to [FSCC] students and [the] institution." Ms. VanLuyck earned Bachelors and Masters degrees in mathematics from Pitt State. She has been teaching mathematics at FSCC for 19 years.

HIGHLIGHTS FROM PHYSICS (Contributed by Dr. Serif Uran and Dr. Rebecca Butler)

- Our graduate program in physics and materials science graduated seven students this academic year. December 2024 graduates: Joseph Okwe, Ronit Chaudhari; May 2025 graduates: Harsh Panchal, Kemila Chaudhary, Bhumikaben Makawana, Himanshi Lnu, and Urvashi Gondaliya.

- The Pittsburg State University Society of Physics Students (SPS) chapter earned the designation of a SPS Distinguished Chapter in December 2024. This award is given by the American Institute of Physics.

- PSU Science Day attracted many high school students to Pitt State on April 24, 2025. Biology, Chemistry and Physics programs contributed to different events. Our physics majors helped with the events. We had many events under the Physics program:

  Physics Frolics events: Mouse-Trap Car competition, Physics Face-Off, Paper Tower Construction

  Earth and Space Science Events: Astronomical Shuffle, Mars Colony Competition, and Rock Recognition.

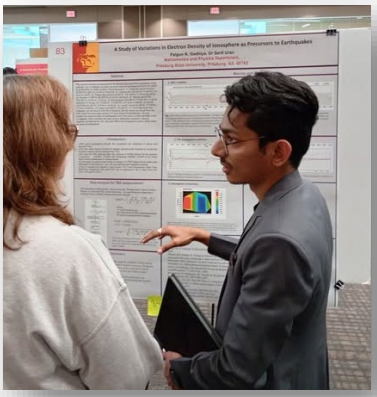
- We offered eleven departmental scholarships to new and existing physics majors this year. We are so grateful to our scholarship donors!

- One of our graduate students was accepted to graduate school at Washington University.

- Eighteen new Materials Science graduate students have been accepted to our master's program. Thirteen new Physics graduate students have been accepted to our master's program.

- A big shout-out to Dr. Rebecca Butler for earning the competitive rank of University Professor! Congratulations for a well-deserved recognition!

Dr. David Pearson at Rumble in the Jungle sharing his love of physics. (Photo credit: Serif Uran)



Physics graduate student Falgun explaining his poster at the PSU Research Colloquium in April. (Photo credit: Rebecca Butler)

Dr. Rebecca Butler (second from right) being recognized for becoming a University Professor with Provost Dr. Susan Bon, Dr. Mark Johnson, Dr. Doug Younger, Dr. Butler, and Dr. Khamis Siam. (Photo credit: Sam Clausen)

Upcoming Events

MAA MathFest, Sacramento, CA, Aug 6- 9, 2025

PSU High School Math Honor Day, Oct 2, 2025

PSU Homecoming, Oct 11, 2025

Joint Mathematics Meetings, Washington, DC, Jan 4-7, 2026

2026 Spring Semester Starts Jan 20, 2026

KSMAA, TBA

PSU Math Relays, April 7, 2026

KME Regional Convention, TBA

PSU Science Day, April 16, 2026

Awards Banquet, April 26, 2026

PSU Mathematics and Physics on Facebook

If you are a Facebook user, there are two ways that you can stay connected with PSU Mathematics. One way is via a group with a focus on teaching called *Gorilla Math Teachers*. It is a great source of information including teaching ideas and job openings. It also provides a community for asking advice and questions related to teaching. The other way to stay connected is with the *Pitt State (Kansas) Math Alumni* group. Information related to the department and alumni is posted along with interesting mathematical tidbits as well as opportunities and job openings. Both of these groups are closed, so that anything posted is only available to be seen by others in the group. (Can you guess why the Kansas part was added to the name of the alumni group?) We would love to have you join either or both groups if you are interested. Just search for the name of the group within Facebook and put in a request to be added to the group.

It is also possible to stay connected with PSU Physics on Facebook. Just "like" Pittsburg State University Department of Physics to keep informed of happenings involving Physics at PSU.

Faculty Recognized for Years of Service

Each year PSU has a Service Recognition ceremony to congratulate those employees who have reached service milestones, i.e., have been employed at PSU a multiple-of-five number of years. Posters are displayed in the department to add to the recognition. The pictures below show the faculty from Math & Physics recognized in 2025.

Thanks for the Support!

A big thanks for donations made to PSU in support of the Math & Physics Department and its programs. These generous gifts have been used to support travel by students and faculty to conferences, as well as student scholarships. Recently, $108,850 was awarded to undergraduate Math majors, $5,000 to graduate Math students, $9,000 to Computer Science majors, and $22,000 to Physics majors.

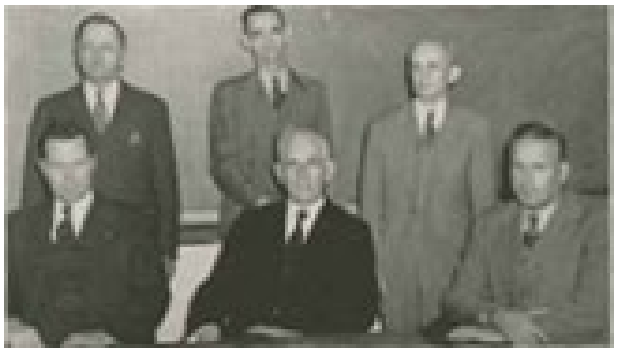
Pre-Images

The next two pages contain a collection of pictures from the "archives". How many can you name and date? (Answers are upside-down at the bottom of the next page.)

1

2

3



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Picture 1: Dr. Helen Kriegsman, Mathematics Department Chair, 1971 Kanza

Picture 2: Physics Faculty in 2006 Kanza. Serif Uran, Kyla Scarborough, Bruce Daniel, Chuck Blatchley, David Kuehn, Rebecca Butler, and Tom Shoberg.

Picture 3: Mathematics Faculty in 1941 Kanza. Standing: L. E. Curfman, Frank C. German, W.H. Hill. Seated: R. W. Hart, J. A. G. Shirk, R. G. Smith (Head of Dept.)

Picture 4: Physics students and faculty at 2015 Spring Graduation.
Tyler Shallenburger, Chathuri Silva, Dr. David Kuehn, Dinushi Jayatunga, Dr. Benjamin O. Tayo, Dr. Serif Uran, Dr. Chuck Blatchley

Picture 5: Kappa Mu Epsilon mathematics honor society, 1957 Kanza,
Front Row: Robert Batley, Robert Hernan, Charles Bell, George Bachman, Robert Kress, Phillip Kubler. Second Row: Vernon Powers, Robert McGee, Bov Vaura, Mrs. Harold (Annabelle) Loy, Peggy Elsasser, Gwendolyn Kirkwood, Betty Fliginger, Barabara Garrala, Ralph Hickman, Walter Wood, President, Leland Wood, Harold Thomas, Walter Sutherland, Robert Little. Third Row: R. G. Smith, Eugene Turner, Bill Ervin, Herb Hildebrandt, Larry Mooney, Ralph Record, Isaac Guinn, Francis Pichler, John Racy, Wendell Barrow, Lewis Bertalotto, J.D. Haggard, Frank German, Vivian Nemecek. Fourth Row: William Bray, Marvin McCracken, Jerry Ellis, Terry Middleton, Charles Long, Tommy Lobb, Eldon Crane, James Harlow, Hubert Kahl, Ed Anderson, Charles Yagher, Larry Everitt, Wayne Vacca.

Kansas Alpha Participates in KME National Convention

Kappa Mu Epsilon, national mathematics honor society, held a National Convention on March 20 - 22, 2025, at Truman State University in Kirksville, Missouri. The tradition of PSU's KME Chapter Kansas Alpha being represented at KME conventions continued with Dr. Cynthia Huffman, Dr. Scott Thuong, and student Seth Loudermilk attending. Seth gave a presentation *Mathematical Breakthroughs Driven by Major Geopolitical Conflicts in the Twentieth Century*, tying for a 2nd place award, based on his honors project for History of Math. Dr. Huffman led a hands-on workshop *Knotty Numbers* about Incan knotted cords, known as quipus. The conference was organized by Dr. Thuong, as President-Elect, and host Gorilla alumna Vanessa Williams.

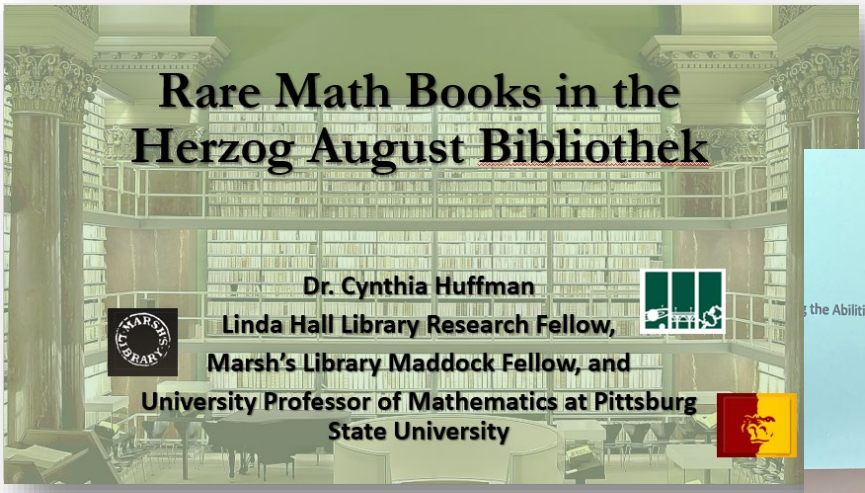
The PSU chapter of KME, which is called Kansas Alpha, has a long history going back to 1934 when we were the 3rd chapter in the country installed into KME. More than 2000 Pitt State students have been inducted into KME since then.

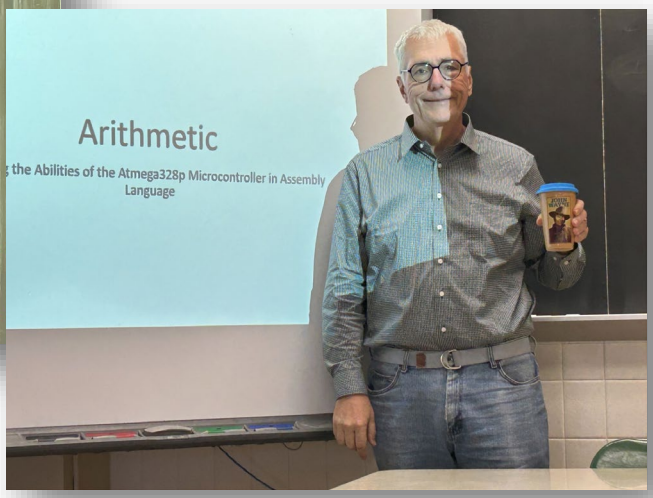
Several faculty members have served national offices with KME, starting with J.A.G. Shirk, who was the second National President of KME and also served as Secretary. Dr. Ron G. Smith served as Vice-President (1957-1961) and Dr. Helen Kriegsman was Editor of the Pentagon journal (1965-71). Dr. J.D. Haggard was Historian (1963-1967). Dr. Harold Thomas served as Historian (1979-1985), President-Elect (1985-1989), and President (1989-1993). He received the most prestigious award granted by KME, the George R. Mach Distinguished Service Award, in 1997. Also, Dr. Thomas and Dr. Huffman each served as Regional Directors for 8 years, and Dr. Huffman served as Treasurer (2007-2015), Historian (2017-2021), and received the Mach Award in 2023. Dr. Leah Childers served a partial term as President-Elect (2017-2019). Dr. Scott Thuong served as President-Elect (2021-2025) and he was installed as President at the Convention. In addition, Gorilla alumna Vanessa Peach Williams (Truman State University) serves as KME Social Media Director.

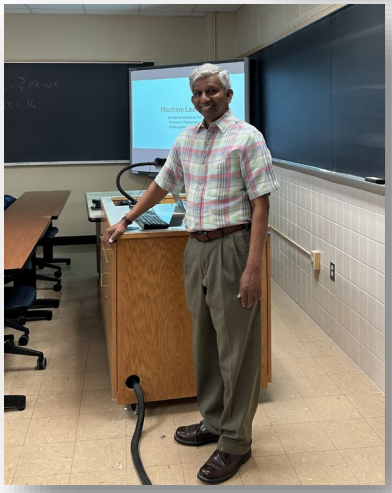
PSU Mathematics Colloquium Series

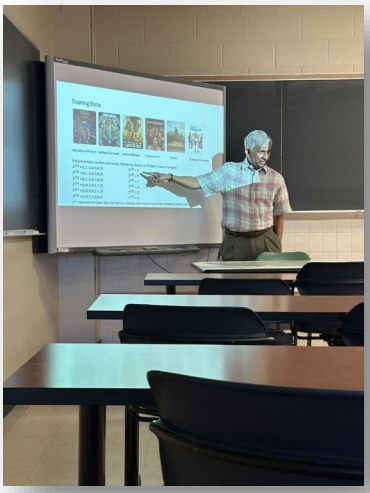
The Math Department has had a regular Colloquium Series since at least 1994. These lectures give the speakers an opportunity to share their research and the attendees a chance to gain new knowledge. To schedule a colloquium or for more information, contact Dr. Scott Thuong at sthuong@pittstate.edu. The colloquia for the 2024-2025 academic year are listed below.

- Dr. Cynthia Huffman, PSU, *Rare Math Books in the Herzog August Bibliothek,* September 12, 2024
- Dr. Bobby Winters, PSU, *Arithmetic,* October 31, 2024
- Palakben Chaudhary, PSU, *A Study of the Violation of Normality Assumption in Multiple Regression*, December 3, 2024
- Dr. Cynthia Huffman, PSU, *The Incan Empire and Knotty Math,* December 5, 2024
- Dr. Ananda Jayawardhana, PSU, *Machine Learning*, March 11, 2025









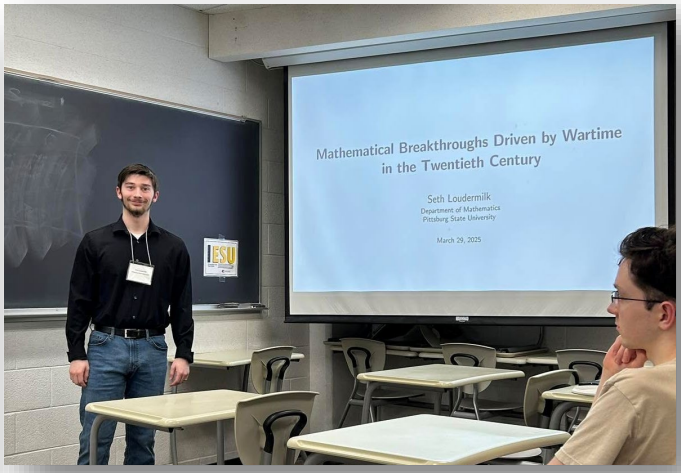
PSU Math Honor Day

The 2024 annual PSU Math Honor Day was held on October 3. Students and teachers from area high schools were treated to presentations by PSU faculty, a planetarium show, and a luncheon. The featured lunch speaker was Lindsey Gaffney a meteorologist at KOAM TV. Faculty presentations included *The Game of Life* (Dr. Scott Thuong), *What's My Price? The Math Behind Barcodes* (Dr. Cynthia Huffman), and *Let's Play Set* (Dr. Tim Flood).

Sandy Law (Leavenworth High School) was recognized as an Outstanding Novice Teacher, while Kristen Holliday (Jasper High School) and Rebecca Svaty (Topeka West High School) were recognized with Outstanding Veteran Teacher awards.

KSMAA Meeting

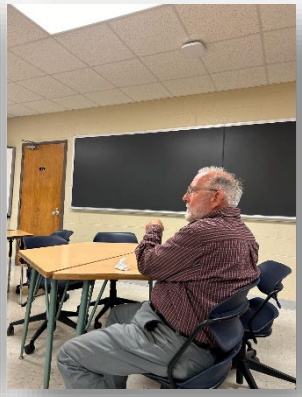
The 2025 KSMAA meeting was held at Emporia State University in Emporia, KS on March 28-29. Two teams of three PSU students each competed in the Kansas Collegiate Math Competition, held in conjunction with the KSMAA meeting. Students participating were Seth Loudermilk, Jonas Garibay, Daniel Crissinger, Caleb Pujols, Alexandra Robinson, and Gage Maggard. Undergraduate student Seth Loudermilk presented on *Mathematical Breakthroughs Driven by Wartime in the Twentieth Century*, and faculty Dr. Cynthia Huffman gave a hands-on workshop *Ancient Andean Arithmetic*. Also in attendance at the meeting were Dr. Tim Flood (KSMAA Historian) and Dr. Scott Thuong (co-coordinator of the Kansas Collegiate Math Competition).

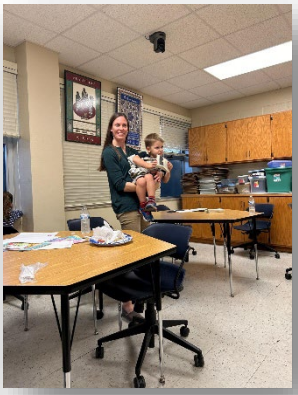


Pictures from MOKAN meetings

MOKAN is an affiliated group of the National Council of Teachers of Mathematics (NCTM). It provides an opportunity for mathematics teachers and friends in southwest Missouri and southeast Kansas to network, share teaching ideas, and learn more mathematics. MOKAN meets three times per school year on the first Monday of October, February and April. Below is information about the speakers during the 2024-25 school year, along with pictures.

- October 2: Randall Hayes, *Unique Ways of Applying Matrices*, catered Smittle House, Yates Hall, Pittsburg State
- February 3: Cynthia Huffman, *Knotty Numbers,* catered Smittle House, Yates Hall, Pittsburg State
- April 7: Jennifer Malan, *Tech Tools for Teachers: 5 Solutions with Curipod*, Keltoi Winery





Pictures from the 2024 Fall Picnic

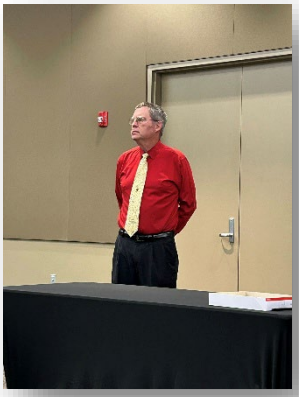
Pictures from the 2024 Christmas Party

Math Professor Installed as National President of Math Honor Society

Dr. Scott Van Thuong was installed as the twenty-sixth president of the national mathematics honor society Kapp Mu Epsilon (KME), on March 20th at the 47th biennial national convention of the organization. The past four years Dr. Thuong has served as president-elect, overseeing national and regional conventions. (KME has national conventions in odd-numbered years and regional conventions in even-numbered years. There are 6 regions.) Dr. Thuong is the third PSU faculty member to serve in the role of national KME president. J.A.G. Shirk was the second KME president (1935-1939), while Dr. Harold Thomas was 17th KME president (1989-1993).

Pictures from the 2025 Honor Banquet

More Pictures from the 2025 Honor Banquet



Even More Pictures from the 2025 Honor Banquet

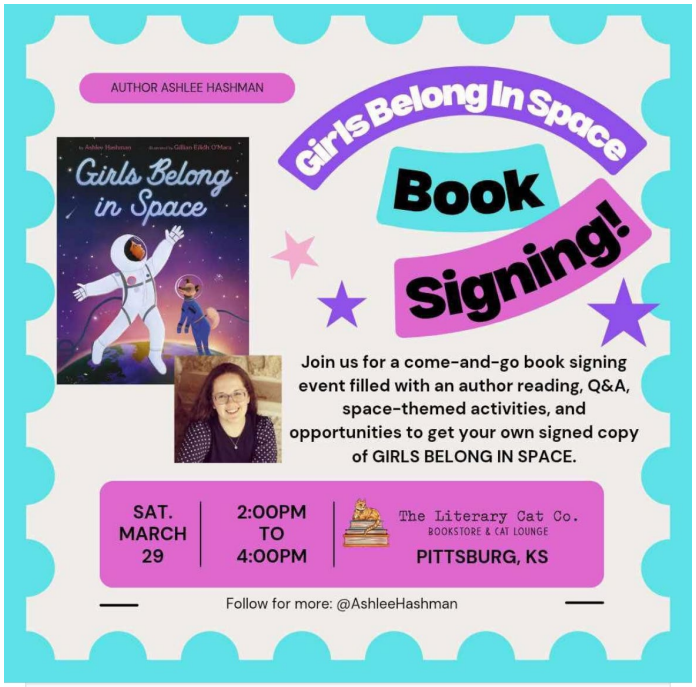
55 years of PSU Math Relays

Organized by Mr. Alan Pommier and Mrs. Suzanne Lindsay, the 55th annual PSU Math Relays was held on April 8. Around 900 students visited the PSU campus to participate. The competition started in 1968 when math faculty, including Don Hight, Jerry Stein, and Bryan Sperry, came up with the idea of a math competition modeled after a track meet. The event gets Pitt State faculty, retired faculty, faculty spouses, alumni, and graduate and undergraduate students involved in welcoming the high school students to campus for a day filled with short individual events and some team relay events. It is also exciting that many of the high school teachers are also Gorillas and can share with their students where they went to college. (Photo Credits: Dr. Ananda Jayawardhana)

Pitt State Math Club and KME

The Pitt State Math Club meets jointly with the local Kansas Alpha Chapter of Kappa Mu Epsilon, mathematics honor society. Dr. Scott Thuong is the Faculty Sponsor and Dr. Tim Flood is the KME Corresponding Secretary. The Math Club meets throughout the year with a math game or a math talk (often by a student) and pizza. Initiation into KME is usually held once a semester. As mentioned elsewhere in this newsletter, Seth Loudermilk spoke at the National KME Convention in March. Below are pictures of Seth Loudermilk presenting on his research in progress on "The Square Sum Problem and Its Generalizations" and Monica Reid who spoke on "As a Matter of Factors: Developing Factoring in College Algebra with Review." Both of these presentations were at local KS Alpha meetings. The third picture is Dr. Scott Thuong, Seth Loudermilk, and Dr. Cynthia Huffman at the National KME Convention at Truman State University in Kirksville, MO.

Alumna Publishes Book



Alumna Ashlee Hisey Hashman recently published a book with HarperCollins Kids titled *Girls Belong in Space*. According to the Seymour Agency which "represents award-winning authors from across the world," "From launching the first US astronauts into space to guiding rovers to Mars, *Girls Belong in Space* introduces young dreamers to innovative women who prove that girls can do anything and go anywhere!

This lyrical and inspiring picture book celebrates women who soared to new heights in the field of aerospace and space exploration."

Mrs. Hashman held a book-signing in Pittsburg at a local bookstore on March 29. The book can also be purchased through Amazon at

https://www.amazon.com/Girls-Belong-Space-Ashlee-Hashman/dp/0063247844/ .

Graduation Pictures

Top Row from December 2024:
Prince Lathiya (MS Math) with Dr. Ananda Jayawardhana; Mr. David Newcomb, Dr. Tim Flood, Dr. Cynthia Huffman, Christia-Rose Gorges (BS Math), Monica Reid (MS Math), Dr. Bobby Winters; Joseph Okwe (MS Physics) with Dr. Serif Uran

Bottom Row from May 2025:
Dr. Scott Thuong, Dharani Maddi (MS Math), Dr. Cynthia Huffman, Mr. David Newcomb; Dr. Sang Lee (College of Business) with Dr. Cynthia Huffman; Masters in Materials Science graduates with Dr. Serif Uran

Photo Credits: Cynthia Huffman, Ananda Jayawardhana, Dharani Maddi, and Serif Uran.

Faculty Updates - Math

Dr. Ananda Jayawardhana

Dr. Jayawardhana completed a 4-month Machine Learning course from MIT Institute for Data Systems and Society in September 2024 and enrolled in a Micro-Masters degree in Statistics and Data Science from MIT. He had a successful sabbatical at the University of Kansas Medical Center during fall 2024. He secured a Research Professor position in the Department of Biostatistics & Data Science, School of Medicine, University of Kansas Medical Center for two-and-a-half years. He has several current research projects with KUMC faculty and PhD students. He presented a poster titled “Mental Health and Socio-Economic Disadvantage Among School Children Kansas” at the Joint Statistical Meeting, Portland, 2024 and published a paper based on the same research. He also presented a poster at the annual IDAD Conference titled "The Association between Depression and Individual Factors among Older Adults" and a paper is almost ready for submission.

Mr. Alan Pommier

The 2024 – 2025 academic year was my second year here at Pitt State. I definitely feel more comfortable about my role this time around. Last fall, I was privileged to mentor two students in their path toward becoming math teachers. This spring, they both student-taught in the Baxter Springs school district. I am so proud of them, and I know that they are going to do great things in the future! I also taught a section of Mathematics for Education I, Calculus II, and Trigonometry. This spring, I had three sections of Trigonometry, so it was a busy time!

In April, we hosted the 55th PSU Math Relays. Last year, I helped Terry Martin plan the Relays, but this year, it was all on me. Obviously, I still leaned on her expertise as well as Suzanne’s, but this time, it really felt like my baby. We had about 55 schools attend, with almost 900 students. I am told that we are back to pre-pandemic levels, so that’s really good to hear. As usual, every member of our faculty has a role in the Relays, and we can’t have the success we have without each and every one of us pitching in. Thank you so much to everyone for making it a lovely experience!

During the breaks, my wife and I have spent some time working on our house, including remodeling the bathroom. We still have a long way to go, but we’re excited to see the home renovations continue. We enjoy watching our kids play ball, working in the yard, and generally spending time together with friends and family.

Dr. Cynthia Huffman

I continue to split my work time among teaching, scholarly activity, and service, with teaching continuing to be my favorite. I intentionally put forth an effort to make learning mathematics fun and relevant for my students, including historical tidbits about the development of topics as well as applications in the real world. It is very rewarding to hear students say that they enjoyed a course so much that did not realize how hard they were actually working. It was great to have a History of Math student, Seth Loudermilk, present his research at national KME, KSMAA, and the PSU Research Colloquium. His mother is a former student of mine.

In 2024, I had 7 peer-reviewed publications in various stages: 4 which appeared, 1 accepted, and 2 submitted. Three of these were solo publications and four were joint. These included 2 book chapters in Birkhauser publications and a book chapter in an MAA publication, 1 scholarly article, 1 book review, and 2 expository articles. In addition, a joint peer-reviewed article from 2013 was published in Spanish. I gave 11 presentations in 2024 at various places: an international conference (by invitation), a national conference (2 presentations by invitation, 1 joint), a regional conference, a state conference, an invited colloquium at another Kansas school, and 3 PSU Math Colloquia. My total number of publications is now 87 and number of presentation is 358.

I love learning new things. Since the last newsletter, I participated in a symposium in Germany and a study trip to Peru. The symposium focused on a medieval scholar named Petrus Ramus and took place in a medieval library. I was the first mathematician to be invited to participate in this symposium and I'm currently working on a chapter of a book based on our presentations at the symposium. Then I traveled to Peru to study the mathematics of quipus and to visit Machu Picchu. It was fun to share what I learned at a PSU Colloquium, a MOKAN meeting, as a workshop at the national KME convention, at the Kansas Section of the MAA meeting, at a local Rotary meeting, and with students at Pittsburg High School.

A few years ago I had a grant to write some Open Educational Resource (OER) materials. Since then I have continued writing OER materials and publishing them on PSU's Digital Commons and more recently, the international OER Commons repository. To date, the 35+ activities have had over 15,084 downloads in 146 countries. I am in the process of writing more activities based on my history of math research.

Service-wise at the national level, I completed my second and final term as the Chief Editor of the Board of Editors for the MAA Classroom Resource Materials book series, having served on the board of editors an unprecedented 14 years (the typical time is 6 years). I also continued in my third term as the Secretary/Treasurer/Newsletter Editor for the MAA Special Interest Group on History of Math. In addition, I continued to serve on the MAA Halmos-Ford Expository Writing Award committee and was invited to chair the committee in 2027. Closer to home, I was the editor of this newsletter, along with being on various committees at the university, college, and department levels, including the CAS Faculty Excellence Awards Committee and the Library Dean Search Committee.

It is wonderful to hear how well so many of our alumni are doing in their careers and personal lives. I sure enjoy hearing what our alumni are doing, whether it be through Facebook, LinkedIn, or some other means (like ballgames!) Please continue to keep in touch! Once a Gorilla, Always a Gorilla!

Dr. Yaping Liu

This is my 30th year of teaching at Pittsburg State University. It will also be my second year of a 3-year phased retirement. I won't be teaching this fall but I'll have my regular teaching responsibilities in the spring semester of 2026.

In June this year, I will again be a table leader in AP reading, managing about 10 readers in reading AP calculus for College Board. In July, I'll teach Elementary Statistics online, as usual. For the rest of the year, I'll have a lot of free time to do things that I have always wanted to do more of, such as travelling, reading, and writing. But more than anything else, I'll spend much of the next few months with my family, which has been the most important thing in my life. I now have 5 grandchildren, with the addition of 2 grandsons last year. I used to say that I can count the number of my grandchildren with the fingers on one hand, but they are certainly more than a handful. The children need so much work from every adult in the family, but it's so fun and intriguing to see them grow.

That's all for now. Wish everyone a wonderful year ahead!

Mr. David Newcomb

During this last school year, I was very busy with the variety of classes which I taught: Quantitative Reasoning, Mathematics for Education I, Calculus I, and Mathematics Education Seminar. In the spring semester I teach Manipulatives, Technology in Secondary Education, and the PSU Dual Credit College Algebra class at Colgan High School. In addition, I taught a section of Computer Information Systems for the Kelce College of Business both semesters.

So, the breaks we have during the school year, especially the summer break, are very very enjoyable. My wife and I have continued some of our usual spring/summer activities. We have already worked on a few lawn mowers for ourselves and relatives. We've had some trees removed around the place and have saved that wood. A continuing project has been to split the wood for firewood. Just finished replacing plywood on two walls of the garden shed. So, we'll be painting it soon.

We've gotten some much needed rain recently, so the pond catfish are getting fed well. And the garden looks very good with green beans, spinach, beets, corn, tomatoes, peppers, squash, and melons. The new grape plants are looking good, also. Carol purchased 20 baby chicks recently, so now she will have some young ones to replace her older ones.

We haven't been able to go camping yet, but the camper is starting to get some attention to get ready for some camping trips this summer and fall.

As a veteran, I have been selected to go on a Kansas Honor Flight to Washington DC in June. I am excited to be able to visit the military monuments and Arlington National Cemetery.

I am still looking forward to the Fall semester and hope students and faculty have a wonderful 2025/2026 academic year at Pitt State.

Best wishes to all.

Dr. Jackson Samuel Ravindran

I am excited to begin my first year as an Assistant Professor of Computer Science in August 2024. The journey so far has been enriching, combining teaching, research, and service. I focus on project-based teaching, and the learning experience with students has been truly rewarding.

In research, my focus lies in Computer Vision and Large Language Models (LLMs). I attended a workshop on Safety for Emerging Robotics and Autonomous Agriculture in December 2024, organized by the Center for Digital Agriculture at the University of Illinois, Urbana-Champaign. In October 2024, I was invited as a guest speaker for a panel discussion on AI and Ethics, alongside Dr. Daniel Hackmann and Dr. Dennis Bielfeldt, held at the Iowa Memorial Union (IMU), University of Iowa. Additionally, I serve as a technical committee member for ASE-347 and the US TAG TC 347 Data-Driven Agrifood Systems project by the American Society of Agricultural and Biological Engineers (ASABE). I also attended the ISO TC 347 Plenary Meeting virtually, held in Berlin, Germany, from March 10–13. On March 31, I participated in the AI in Agriculture conference at Mississippi State University, where I presented my work on AgroLLM.

Thanks to Dr. Winters for providing the opportunity to work on a kiosk project for the Miners Hall Museum in Franklin, Kansas. After extensive discussions, the project officially began in February 2025. Four students are currently involved in the project as interns. The development includes both a kiosk and a mobile application for the museum, serving as a community engagement initiative from PSU. Our first deployment was successfully completed on May 9, 2025, and the students' contributions have been phenomenal. The project has received recognition on multiple platforms, including Yahoo Tech News.

Currently, I am also involved in scholarly activities, mentoring two student-led projects. One project involves the development of a website for farmers, offering an informative and interactive platform powered by LLMs. The second project is an AI-driven interactive portal that functions as a virtual pharmacist, providing patients with information about medications, including dosages and potential side effects.

Overall, I find immense joy in teaching and engaging in scholarly activities with students. These experiences continuously enhance my knowledge, and I am excited about the upcoming academic year.

Along with the students Monika BK, You E Kry, Ben Rangel and Carson Stottmann at Miners Hall Museum.

Panel discussion on AI and Ethics, alongside Dr. Daniel Hackmann and Dr. Dennis Bielfeldt

Dr. Scott Thuong

I've had the opportunity to teach a diverse set of courses in recent semesters. Last fall, I taught Math 543 (Probability and Statistics) while Dr. Jayawardhana was on sabbatical. In the upcoming fall, I'll be teaching Math 656 Mathematical Modeling, in addition to continuing my work with the Data Structures and Algorithms course that supports the Computer Science program. The variety certainly keeps things interesting and fresh!

In terms of service, I was sworn in as President of the national mathematics honor society, Kappa Mu Epsilon, and will serve a four-year term in this role. I also continue to serve as co-coordinator of the annual Kansas Collegiate Math Competition—a role I particularly enjoy, as it involves crafting original problems that require creativity to solve. I'm also responsible for coaching our teams. This year, we were fortunate to have two teams of three students each participate. They dedicated themselves to tackling challenging math problems throughout the year and delivered a strong performance at this year's competition. I'm incredibly proud of their hard work and commitment.

This year, I plan to wrap up a long-standing research project focused on the classification of 4-manifolds with Sol × $\mathbb{R}$ geometry. The write-up has proven challenging due to the extensive matrix calculations involved. In addition, I'll be supervising a student research project in graph theory this fall, which may also explore into number theory, depending on the direction the work takes.

Dr. Bobby Winters

I am back teaching and having a blast. I am enjoying teaching my old courses as well as some new ones. The Computer Science students are new, different, but not too different. My family is well: Jean has her dream job in the Chemistry teaching lab, Lora is in the writing center, Sarah is teaching at the PSU pre-school, and Lydia will be getting married in September.

Faculty Updates - Physics

Dr. Serif Uran

It has been a great 21st year at Pittsburg State for me. Where did the years go? A lot have been learned and accomplished. Overall, an incredible experience educating young minds, seeing them graduate, flourish in new careers and become contributing members of our society. Our physics program has been an integral part of the university, helping to train a new generation of doctors, nurses, scientists, materials scientists and engineering technicians. Our graduate program in physics and materials science graduated seven students this academic year. Also, the Pittsburg State University Society of Physics Students (SPS) chapter has earned the designation of a SPS Distinguished Chapter in December 2024. Our SPS students helped make our Science Day a success along with our dedicated faculty. We offered scholarships to new and existing physics majors and invited them to our awards banquet. Without our generous donors we would not be able to make those offers. We are so grateful for their benevolence.

On a more personal level, I have taught introductory to graduate level physics classes, advised students, served as SPS advisor, attended recruitment events, served as a PSU Colloquium judge for oral and poster presentations in April, and was a part of seven thesis committee memberships. I also had the pleasure of serving on the College of Arts and Sciences Faculty Excellence Awards committee. In addition, as a program coordinator, I prepare class schedules, meet with prospective new/transfer students and admit physics graduate students to our program.

I have been involved in researching electrical properties of soybean polyurethanes filled with conducting and non-conducting fillers, graphite exfoliation, solar cells and thin films. We purchased a new instrument to measure dielectric properties of materials and started testing samples we made. Dr. Zoran Petrovic and I are also applying for grants and involve students in research.

I hope we will have a fabulous 2025-2026 academic year. Best wishes to all our donors and thank you for your generous support!

Alumni Highlight

Where we "brag" on one of our former students!

Dr. Margaret Mohr-Schroeder is the featured Gorilla in this edition of the newsletter. She is currently the Vice Provost of Academic Affairs and Innovation at Kansas State University. It is an inaugural position started in Fall 2024. Originally from Wichita, Dr. Mohr-Schroeder earned a BSEd in Math with a minor in Biology in 2002 at PSU followed by a MS in mathematics in 2004. She then went on to get a PhD in Curriculum & Instruction – Math and Science education emphases at Texas A&M in 2006.

Dr. Mohr-Shroeder stated that it has been great to be back in the state of Kansas and working at a land grant institution. Working across the state and forging new partnerships that directly impact opportunity and access for our students is important to her.

Previously, she was at the University of Kentucky from 2006 – 2024. She began as an assistant professor of secondary mathematics in the College of Education with a courtesy joint appoint in the Department of Mathematics in the College of Arts & Sciences, before she transitioned to Professor of STEM Education as she moved through the ranks and ended her career at UK as senior associate dean in the College of Education. Because of her deep knowledge of mathematics she learned through her coursework and professors at Pitt State, she regularly served on doctoral committees in the mathematics department. She is grateful for the mathematics knowledge from her time at Pitt State as it has greatly helped her throughout her career and it has also allowed her to stay connected to topics in math that she loves deeply.

Dr. Mohr-Schroeder has won numerous awards as a student, athlete, and faculty member, including Academic All-MIAA (cross-country and track) for 3 years, Education Exceptional Leadership Award (Texas A&M), a lifetime achievement award from the Kentucky Council of Teachers of Mathematics, Golden Apple Awards from the Fayette County (KY) schools, Undergrad Research Faculty Mentor (UK), and the Award for Excellence in ntegrating Science and Mathematics from the School Science and Mathematics Association.

When asked how she uses math skills on the job, she answered, "I definitely use it every day! Because of my education in the department of mathematics at Pitt State, I have been able to leverage my ability to understand numbers and systems in a way that most others cannot. It's hard for me to explain it to others, but much like machine learning, I've taken all different types of applications and approaches and use that on a daily basis to understand the numbers and systems that I'm working within and for. From understanding where we need to grow and maximize enrollment to sitting down with faculty and students from multiple disciplines and finding common ground between them to develop inter-disciplinary and transdisciplinary programs, I get to use my degrees to provide opportunity and access to multiple communities and students. From a research perspective, I have been heavily involved as a researcher. I have garnered and participated as PI or co-PI in nearly $20 million on external funding. A majority of our work (I co-created an amazing collaborative research team!) focuses on equity, opportunity, and access to high quality STEM experiences, especially outside of the classroom. Much of this work is focused on solving messy, wicked problems and so problem solving, or I like to say solution seeking now, is also part of my every day. From thinking forward to solving spur-of-the-moment challenges, the ability to pivot and problem solve on any given topic is an essential part of my every day. As a mathematics major, I'm grateful for the opportunity to really study multiple different solutions as that is still how I approach problem solving today."

Margaret is married to a Kentucky-native who majored in physics and math as an undergrad and also has a PhD in mathematics and science education. They have four children who range from middle school to elementary. All four list mathematics as their favorite subject with science and robotics as a close second. They are very active and involved in sports and their STEM community.

"While I work at K-State now and wear purple regularly, I am a Gorilla at heart and through and through. I talk a lot about my experiences at Pitt State and am grateful for the many opportunities I was afforded there. While saying yes to everything is not always the best thing to do, saying yes to things, even when they scare you, can open a lot of doors and perspectives that can lead to some incredible knowledge and opportunities down the road. I have definitely taken to heart that while things happen in ways that we don't always agree with, there is usually some connection down the road that you can point back and say 'oh yes, this prepared me for this new thing or challenge.' My time at Pitt State allowed me to develop my own identity and explore that identity in a way that I couldn't have done elsewhere. My education and athletic opportunities as a Gorilla paved my path for where I am today and I can firmly say I wouldn't be here without them. Go Gorillas!"

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