



AMEP News

Applied Mathematics, Engineering, and Physics
Degree Program
University of Wisconsin – Madison

2026



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Photo credit: University Communications

Letter from the Coordinators

Dear Friends of AMEP,

It is our pleasure to send you this 2026 AMEP newsletter. This is our biggest newsletter so far, with student stories featuring Ikhlas Addow, Riley Soutar, Madelaine Pare, Coda Richardson, Arushi Patil, Steven Witt, and Harry Luo! Yet, that is just a small sample of many such stories across our cohort of dynamic students, 24 of whom graduated this past May. Two of those 2026 graduating students were selected as AMEP leadership prize recipients, Amitabha Shatdal and Harry Luo, together with junior Mitchell Stachowiak. The AMEP leadership prize was endowed by AMEP Alum Dan Koellen and has been awarded since the early 2000's.

Our faculty feature profiles Professor Wenxiao Pan who serves as AMEP faculty advisor for Mechanical Engineering. Her research is on computational and ML/AI enhanced modeling and simulation of complex fluids, soft matter and solid materials.

Our Alumni spotlight is on Eric Hestekin who joined Boeing as a systems engineer upon graduating from AMEP in 2014, and then made a leap to the car racing world in 2019. Eric is now a Senior Data Analyst with the Arrow McLaren Indycar team!

Our 2025 newsletter prompted Kurth Krause to reach out to us. Kurth started in AMP in 1958 and graduated from AMEP in 1962. AMP – Applied Math and Physics – was the precursor to the AMEP program. Sputnik, launched in October 1957, started the space race of the sixties, as well as the expansion of the AMP program to the AMEP program. Kurth worked at TRW Inc., a major Aerospace company of that era, from 1967 to 1979. During that time, he was deeply involved with the Apollo, Shuttle and Space Station programs. You can read about his fascinating story in his book "My 36 years in Space".

We look forward to reconnecting with more of you and hearing about what you have been up to since you graduated from AMEP. Please keep sending us news and we hope that you will enjoy this newsletter about that small program "that keeps punching above its weight".

This newsletter was expertly produced once again by Morgan Adams, thank you Morgan for all you do for AMEP and our students.

Best wishes,

Fabian Waleffe
Professor of Mathematics
Professor of Mechanical Engineering

Deniz Yavuz
Professor of Physics

Faculty Feature

Interview with AMEP Faculty

Prof. Wenxiao Pan



Can you share some about your academic and career path? What are you working on now?

I started my training in mechanical engineering as an undergraduate and became interested in computational work during my master's studies. When I applied to PhD programs, I was fortunate to have the opportunity to pursue applied mathematics. These experiences eventually led me toward computational engineering, with applications in complex fluids. I'm currently working in two main research areas: machine-learning-enabled reduced-order modeling and quantum computing, with applications in materials design and advanced manufacturing.

What has it been like for you at UW-Madison?

It has been a very rewarding experience since joining UW-Madison. I have had the opportunity to start my own research group, establish my research portfolio, and continue to grow and expand it. At the same time, I have had the opportunity to teach more seriously and to learn (and continue learning) how to become a more effective teacher.

What has your experience with AMEP been like?

Since joining in 2022, I have had the opportunity to work with AMEP students both in my classes and, in some cases, in my research group. I think AMEP is a unique and valuable program. The students I have had the opportunity to work with more closely have had strong academic backgrounds and have been highly self-motivated and eager to learn.

How did you first become interested in your field?

I first became interested in the field through a scientific computing course I took in college. I learned how to implement numerical algorithms to solve challenging problems and run simulations, and I thought that was very cool at the time. I was also attracted to the fact that, compared with experimental work, computational research gives you a great deal of control over the accessibility. I could keep experimenting with the models and simulations and dig deeper into a problem without the same constraints associated with access to experimental instrumentation.

What drew you to research in your current area?

The broader vision of my research is to push the boundaries of computing in terms of both accuracy and efficiency. I believe that accurate and efficient computer simulations are critical for scientific discovery and engineering design. I have therefore always been motivated by the question of how to make computer simulations faster without compromising accuracy. Along this line, I keep exploring new computing paradigms and techniques, including machine learning and quantum computing.

How did you decide on academia as your career choice? Did industry ever appeal to you?

Academia was my first choice, although I have always been open to opportunities in industry. I believe that wherever you work, there are interesting problems to solve and opportunities to make good use of computing. For me, academia has been

especially appealing because it gives me the freedom to explore fundamental questions, pursue new ideas, and work with students.

What advice would you give to undergraduate students looking forward to a career in your field?

Be willing to learn new things and develop the ability to learn quickly. The field is changing very rapidly, so being able to adapt and pick up new knowledge is extremely important. At the same time, mathematics is a foundation for much of the work in computational engineering, so I would encourage students to build as strong a mathematical foundation as they can.

What advice would you give to undergraduate students wanting to get involved in research in your field?

Don't hesitate to reach out to faculty members and ask about opportunities to participate in their research and projects. Once you have the opportunity, take it seriously and get involved in the actual research work. You learn research by doing it! Even if the experience is challenging at first, getting hands-on experience is one of the best ways to understand whether research is something you enjoy and to develop the skills needed to succeed.

Faculty Recognition

Prof. Saverio Spagnolie



Saverio Spagnolie has been elected to the chairline for the American Physical Society (APS)'s Division of Soft Matter Physics. Through a multi-year progression as Vice Chair, Chair-Elect, Chair, and Past Chair, he will guide the division's operations and scientific programming.

Spagnolie will begin his tenure by directing DSOF outreach efforts, like the Squishy Science Sunday event which takes place before the annual APS Global Physics Summit (see the related piece in the Other News section). Upon ascending to Chair, he will take on primary executive responsibilities, presiding over meetings and managing strategic needs. Among his stated goals for this service is to "bring the math" to APS DSOF.

Saverio Spagnolie (left) and AMEP student Arlo Wilker (right) discuss aerodynamic drag and viscoelastic hysteresis in New Glarus, WI

Prof. Chris Rycroft



Chris Rycroft received a Vilas Mid-Career Investigator Award from the Office of the Provost. Vilas Faculty Mid-Career Investigator Awards recognize research and teaching excellence in faculty who are at mid-career. The prestigious awards are for UW-Madison faculty members approximately 10 to 20 years into their career.

These awards for outstanding achievement are funded through the generosity of the Trustees of the William F. Vilas Estate. Funding to support the awards comes through Research and Sponsored Programs.

Student Stories

Realta Fusion and Community Outreach



AMEP student Ikhlas Addow (left) assisting a participant of the Stellar Tech Girls summer camp

Ikhlas is beginning her fourth year at UW–Madison, where she is pursuing a degree in AMEP with an additional major in Physics and a certificate in Nuclear Engineering Materials. This summer, she is working as a fusion intern at Realta Fusion, a Madison-based company developing magnetic-mirror fusion technology and designing a future fusion pilot plant.

Realta's work builds on the Wisconsin High-temperature superconducting Axisymmetric Mirror (WHAM) which provides a platform for testing the physics and technology needed for future fusion systems. Ikhlas's internship connects experiments being performed on WHAM with the design decisions that will shape Realta's next generation of devices.

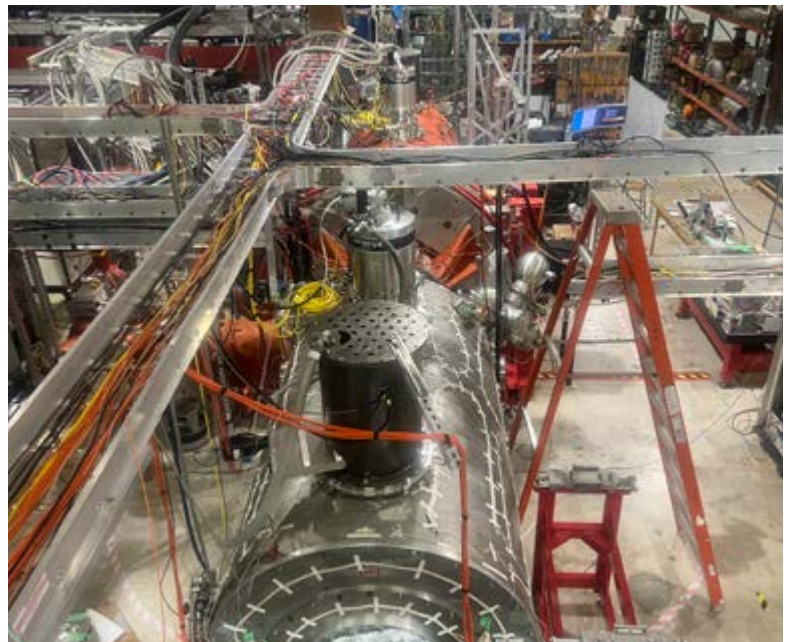
Her main project focuses on neutral beam injectors, which heat fusion plasmas by directing high-energy neutral particles into them. These systems use gases such as hydrogen or deuterium, and part of that gas can travel beyond the injector and enter the main fusion chamber. Understanding and controlling this gas is important because excess neutral particles can cool the plasma, increase energy losses, and make it more difficult to maintain the conditions required for fusion.

Ikhlas is developing a computational model that follows how neutral gas moves through the injector and into the fusion device. She is using results from WHAM to ground the model in a real operating system, then extending it to explore how different injector settings influence the plasma. The goal is not only to understand what is happening in WHAM, but also to help Realta determine specific gas-puffing parameters for neutral beam systems in future devices.

By connecting injector operation with plasma behavior, the model can help answer broader design questions. It allows Realta to explore how changes in gas input, pumping, and system geometry could affect fusion performance before those choices are built into a pilot plant. This makes the project part of the larger effort to turn present-day fusion experiments into practical power-producing technology.

Ikhlas's work also includes hands-on engineering projects that support the modeling and experimental program. She has contributed to vacuum-system testing, electronic circuits, instrumentation, and CAD work, gaining experience with how a fusion device moves from a physics concept to a functioning piece of hardware. Rather than being separate tasks, these projects help her understand how the different parts of a complex fusion system fit together.

The internship builds on Ikhlas's previous plasma physics research at UW–Madison. With the UW plasma physics group, she worked on stellarator optimization, studying how fusion



WHAM facility at the Physical Sciences Laboratory at UW–Madison

devices can be designed to better confine plasma. She also conducted research on in-situ boronization for the Helically Symmetric Experiment (HSX). Her work at Realta continues that path while expanding her focus from university research toward the design and operation of future commercial fusion systems.

Ikhlas also participates in outreach during her internship by volunteering with Stellar Tech Girls, a summer camp that introduces young girls to STEM fields through hands-on activities, demonstrations, and conversations with people working in science and engineering, teaching the campers about fusion energy and STEM. As a Black woman in physics and engineering, she believes that representation and early encouragement are important for building a more diverse scientific community. She hopes that sharing her own experiences will help younger students see fusion and other technical careers as fields in which they can belong and make an impact.

Her internship reflects the interdisciplinary nature of AMEP by bringing together physics, mathematics, computation, experimentation, and engineering design. Through her work at Realta, Ikhlas is helping connect current fusion research on WHAM with the tools and operating strategies needed for a future fusion pilot plant.

Studying AMEP in Sweden



AMEP student Coda Richardson on a trip to Germany during his semester studying abroad

learning about accelerator physics and the production of photons and neutrons for the physical sciences.

I was also able to meet other physics students from around the world, and have wonderful conversations with all of them. One of my favorite memories was going to a physics ‘pub’, which was a small pub the physics student union would hold in the basement of the physics building every Wednesday. I was able to discuss physics and share drinks with first year students to PhD students. I also was able to participate in the physics student union by making treats once that semester.”

Coda was able to take courses which counted for AMEP degree requirements and his Honors requirements. So if you’re interested in studying abroad but worried that you won’t find STEM courses that will count for AMEP, take a look

Coda Richardson is a fourth-year AMEP student who is also pursuing Honors in the Liberal Arts. In Fall 2025, he studied abroad in Lund, Sweden at Lund University.

“My experience in Lund was amazing. I was able to tour the MAX IV accelerator and the European Spallation Source (ESS), along with being able to take a class

2025-2026 Graduates

Congrats to our new AMEP alumni!

Xicheng He
Nicholas Soule-Albridge

Thomas Adamson
Max Bailey
Travis Carlson
David Deng
Kevin Forman
Spencer Kwan
Haoyi Lin
Harry Luo
Andrew Mandel
Alexander Minus
Lucas Ortengren
Arushi Patil
Charles Schmidt
Henry Schnieders
Amitabha Shatdal
Nathanael Tedi
Nathan Tock
Jeremy Wang
James Wharton
Steven Witt
Michael Zhao

Awards

Congrats to all of our AMEP students who received awards this academic year!

AMEP Leadership Prize

Amitabha Shatdal, Mitchell Stachowiak, and Harry Luo

UW-Madison Hilldale Undergraduate/ Faculty Research Fellowship

Michael Zhao

College of Letters & Science Dean’s Prize

Amitabha Shatdal ([view the article](#) for details)

Researching Nuclear Energy



AMEP student Riley Soutar at the Graphite Reactor at ORNL- the world's first continuously operated nuclear reactor

Riley is a fourth-year AMEP student. "I joined the Heat Transfer and Safety Analysis Laboratory during my sophomore year at the University of Wisconsin-Madison, with little knowledge of where a degree in AMEP would take me. Now as a senior graduating in the spring, I have worked on several projects modeling and analyzing the performance of nuclear reactors and found a passion for nuclear energy. In the fall of 2025, I was able to work on my own research project, in which I was responsible for building a thermal-hydraulic model of a small boiling water reactor. Over the last year I completed this model and will now move towards using it for stability analysis of these reactors. Because of this laboratory experience, I have been able to work with several specialized nuclear reactor simulation programs and learn more about nuclear power and its industry than from any of my classes.

In AMEP coursework, you learn about a range of disciplines across math, physics, and engineering. However, to apply these skills, I believe professional or research experience is incredibly important. Research is a great way to actively use these skills and build knowledge simultaneously as you learn throughout the school year.

Professionally, joining a lab and working with experts in the field has opened more doors than I can imagine. It is because of the network and experience I have built at the UW that I am interning at Oak Ridge National Laboratory (ORNL) this summer, working with the Fission and Fusion Directorate. Research has also helped me develop more broad skills that apply to any discipline, including technical writing, communication, and organizational skills.

When it comes to first getting involved, it is never too early to connect with professors and ask if they are looking to bring in undergrads. Try to reach out to professors you have had in the past or those pursuing work you find interest in. Professors are constantly looking for more help, and as someone who got their position with a single, cold email, never be afraid to ask!"

Fermilab and USPAS

Madelaine (Maddie) Pare is a fourth-year AMEP student and is pursuing an additional major in physics.

"This summer I spent 12 weeks at Fermilab as part of the ASPIRE Fellowship program, working on a project through PIP-II—the major accelerator upgrade that will provide Fermilab with a high-power proton beam for future neutrino experiments. I was fortunate to work under Jeremiah Holzbauer, an alum of our degree program, whose guidance made my project both accessible and exciting. For the fellowship, my project focused on validating the response of a PIP-II beam position monitor (BPM) by comparing simulated data using CST Microwave Studio with measurements from a wire-driven test stand. The simulation allowed me to study the BPM's behavior across a wide range of frequencies and positions, while the test stand taught me about real-world mechanical effects and how they introduce differences in the BPM's positional sensitivity. Once analysis was completed, I presented my findings through a poster, slide talk, and written report.

Outside of the project, the internship gave me an amazing look inside



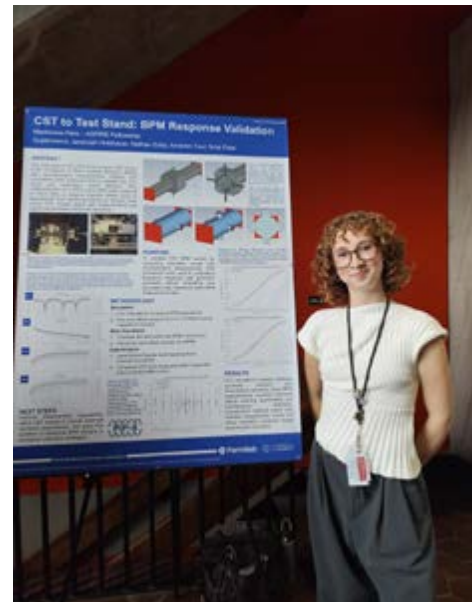
AMEP student Madelaine Pare (right) and AMEP alum Jeremiah Holzbauer (left) at the Deep Underground Neutrino Experiment

the lab. I toured PIP-II twice during construction, visited MINOS to learn more about a deep underground neutrino experiment (DUNE) and Fermilab's off-axis long-baseline NOvA experiment, and stopped by the Short-Baseline Neutrino Detector (SBND) to see their liquid argon detector. I also spent some time in the main control room, checked out the Main Injector, and visited several test facilities—where I saw cryomodules up close and happened to be there the day the Radio Frequency Quadrupole (RFQ) was transported out of the test area on its way to installation. Overall, the ASPIRE program gave me hands-on experience with accelerator technology and a behind-the-scenes look at how a major physics facility operates—easily one of the best parts of my summer.

I also got to spend a week in St. Paul, MN for the Concepts of Accelerator Science and Technology course through the US Particle Accelerator School (USPAS), and it ended up being one of the highlights of my internship. The class mixed lectures with hands-on labs, so every afternoon we got to actually play with the hardware and tools used in real accelerator facilities.

We worked through four different labs: a dipole magnet lab, where we explored how magnetic fields steer charged particles and looked at different types of dipoles—from simple electromagnets to the superconducting ones used in large accelerators; an RF cavities lab, where we used a network analyzer to sweep frequencies, study cavity resonances, and measure things like reflection, transmission, and quality factor (Q); a diagnostics lab with a beam position monitor (BPM) and fast current transformer (FCT), where we generated “beam-like” signals with a function generator and watched how the diagnostic devices responded in real time on an oscilloscope; and finally a simulations lab in Sirepo/Jupyter, where we cloned a set of Python notebooks and ran beam physics simulations to tie the theory together in a more visual way.

Overall, it was a great way to see how the math and physics we learn in class show up in real accelerator systems. If you're even a little curious about accelerator science, USPAS is absolutely worth checking out—I learned a ton, met a bunch of cool people, and it definitely got me more excited about working in this field.”

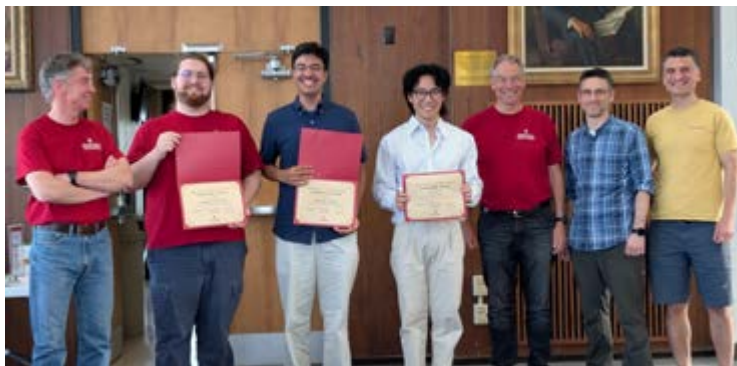


AMEP student Madelaine Pare next to a poster on her summer research

AMEP Get-Togethers

We had great get-togethers this year with AMEP alumni present at both the Fall and Spring events. In Fall, we had many alumni attend including Dan Koellen, Craig Heberer, Cary Forest, Yufan Xu, and Jeremiah Holzbauer. Yufan gave a brief presentation about the cool plasma physics work he does at the Princeton Plasma Physics Lab.

In Spring, we wished our graduating students well and heard about their next steps. We also recognized this year's AMEP Leadership Prize recipients: Harry Luo, Mitchell Stachowiak, and Amitabha Shatdal.



(from left) Prof Waleffe, AMEP students Mitchell Stachowiak, Amitabha Shatdal, Harry Luo, AMEP alum Dan Koellen, Prof Spagnolie, and Prof Yavuz



AMEP alum Yufan Xu presenting his work to current AMEP students

Alumni Spotlight

Alumni Interview with E. Hestekin

AMEP alum Eric Hestekin graduated with a BS-AMEP in 2014.



AMEP alum Eric Hestekin (left)

Can you share some about your academic and career path? What are you working on now?

I graduated in 2014 with AMEP and Applied Math double major. I had one internship my senior year at Trek Bicycle as an Engineering Analyst, focusing mostly on aerodynamics.

My first job after graduating was at Boeing in St. Louis working as a Systems Engineer and Analyst on the F-15 Mission Systems program. Shoutout to Professor Waleffe's vector calc course because I used it a ton in that role!

After 4 years in St Louis I went to Seattle to work on commercial airplanes with Boeing, in an avionics systems design role. I missed the data analysis I was doing prior so I went to work in a test and analysis role in P-8 avionics systems.

In 2019 I went to the Formula 1 race in Austin and thought it was so cool. I started using the public F1 telemetry data for school projects as I had just started a Master's degree in Business Analytics. I started looking at jobs in F1 but they are all based in Europe. I put in an application to be a Systems Engineer at the Arrow McLaren Indycar team. I was hired as a Data and Strategy Engineer and am now Senior Data Analyst with the team. I also worked as a Performance Engineer which is basically the assistant engineer assigned to one car and driver.

Why did you decide to pursue AMEP? How did you hear about it?

I originally planned to go into the School of Education as

a math major but had a great advisor who talked me into engineering. I was still interested in advanced math so AMEP was a perfect fit. I think my advisor pointed out AMEP as a good option since I didn't need to wait to get into the College of Engineering which would've added a year to my undergraduate time.

How did AMEP prepare you for your current career?

All my roles at both Boeing and McLaren involve a broad understanding of complex systems. Having the broad background from AMEP was great preparation for this. I can understand the physics of how the sensors work, the math needed to transform the data into useful information, and the engineering needed to integrate all of it.

What advice would you give to current AMEP students?

Find ways to apply what you are learning to a hobby or passion. Early for me that was on bike data on Strava and that got me an internship. Later in my career that was on racecar data and that got me my current job.

What were your favorite classes?

Optics (Physics), Vibrations (EMA), PDEs (Math), and even though I got a pretty poor grade in it, vector calc turned out to be a favorite in hindsight with how I have used it at work.



AMEP alum Eric Hestekin (second person to the right of the driver) with the Arrow McLaren Indycar team

What area of engineering did you focus on in AMEP? What drew you to that area?

Engineering Mechanics and Aeronautics (EMA). I have always been interested in aerodynamics and that was the main factor in choosing EMA.

What topics would you recommend current AMEP students get experience with (in or out of the classroom) if they're interested in the work you're doing?

Data analysis is the number one. Until the last few years I would say learning how to code but in the last year I have coded much less with the introduction of AI agents. The data analysis doesn't go away, and if anything is more crucial because AI can often be confidently wrong. Getting the core abilities of acknowledging all the assumptions being made, understanding the data, and knowing how to best visualize the output are still critical whether you are coding the analysis or an AI is.

What advice would you give to recent AMEP graduates?

Never stop learning!

Reliability Engineering Co-Op



AMEP alum Arushi Patil on-site at Domtar Paper Mill

Arushi Patil graduated in Spring 2026. She participated in this co-op in the summer and Fall of 2025. She also received the AMEP Leadership Prize in 2025.

"I was a Mechanical/Reliability Engineering Co-Op at a paper mill called Domtar up in central Wisconsin. I really enjoyed working at Domtar.

On the mechanical side, my responsibilities included project management tasks such as executing equipment installation processes. My responsibilities on the reliability side included monitoring machine integrity and maintaining bill of material accuracy.

During my time at UW-Madison, I also did research with the Advanced Manufacturing department, and going on Co-Op really helped me see the difference between academia and industry. I discovered that I preferred the faster pace and work/life balance of industry a lot more to research and aimed to find similar jobs to that after graduation.

I found my Co-Op through the Engineering career fair, and I also found my current full-time post grad job at Emerson through the career fair.

I know as an AMEP student it sometimes feels daunting to go to an engineering focused space, but if the engineering industry is something you want to explore for yourself, I would highly recommend checking out the engineering career fair. My advice would be to be confident, prepared, and show genuine interest in the companies you're talking to."

A Welder's Research

Steven Witt graduated in Spring 2026. He worked as a professional welder for



University Communications

Make a Gift

Our AMEP Support Fund supports activities designed to improve AMEP's ability to prepare students to successfully meet industry needs, to create a sense of community among students and faculty affiliated with AMEP, and enhance visibility of AMEP on campus and to external audiences.

To mail a donation, please visit supportuw.org/how-to-give/printable-forms for instructions.

To make a secure gift online, please visit supportuw.org/giveto/amep.

several years before attending UW-Madison to pursue an AMEP degree.

"I contacted Dr. Nimityongskul after seeing his independent study course offering. Coincidentally, he said that he was looking to make a weld test to certify student's tig welds in a new bicycle building class that's being offered. This project aligned with my goal of gaining Finite Element Analysis experience while building on a skill I had a lot of prior experience in; welding.



AMEP alum Steven Witt (left) with AMEP student Arlo Wilker (right) in front of his research poster

Our approach was based on ISO 4210-6, the ISO standard for testing the safety of bicycle frames and forks. Most of these tests are done in fatigue on full bicycle frames or forks. Our objective was for these tests to be accomplished before the students started welding their bike frames, so it needed to be simple to implement and time effective. We linearly interpolated an S-N curve to establish a yield-based threshold for testing the weld samples.

I designed the test fixture on Solidworks using the parameters I found with some MatLab code I made. The design of the fixture and test sample occurred simultaneously. The test fixture needed to be stiff, quick to set up, and have good compatibility with multiple machines in the UW-Madison Engineering Dept Test Lab. It also needed a lot of degrees of freedom in its setup to accommodate test samples that may not be built to the exact dimensions of the blueprint. I made the fixture in the UW-Madison ECB shop using precision lathe and milling techniques. I then performed both yield and fatigue tests using the fixture to set a baseline for future bike class weld tests.

As an AMEP student, I found it incredibly useful to have a great foundation in math and physics. My main interest is in engineering and having a solid foundation in math and physics made my engineering classes very enjoyable. I was able to focus more on the engineering concepts since I had already

learned the math and physics behind them."

Quantum Error Mitigation

Harry Luo graduated in Spring 2026 with additional majors in physics and math and an Integrated Liberal Studies certificate. He is now pursuing a PhD from the Electrical and Computer Engineering Department at the University of Minnesota. He is planning to focus on condensed matter materials.

He is a 2026 recipient of the AMEP Leadership Prize which recognizes academically strong students who are involved in and/or promote the AMEP program.

"I worked with Prof. Matt Otten from the physics department on a quantum error mitigation project. In brief words, we studied the enhancing of Gottesman-Kitaev-Preskill (GKP) codes, one of many ways to build a qubit from a physical system. In particular, we were driven by how we can start from a known relation between the photon number (the energy it takes to construct a physical qubit) of a GKP code and its coherence (how long can it store information), to seek an extrapolation relation that can predict performance of an ideal qubit at an 'infinite energy limit'.

In other words, we are interested in emulating an ideal GKP system under limitations of a currently-available, limited-energy system. The work was done numerically, and for which I had to learn open quantum system simulations, high throughput computing, and how to condense the core ideas of a publication in a single figure, among many other things.



AMEP alum Harry Luo (center) presented with the 2026 WQI Best Undergraduate Research Poster Award

I have presented our research result as a journal submission (under review, at the time of writing this), and as a talk at the APS March meeting in the session "Recent Advances in GKP code". There were many canonical scholars whose work I've extensively cited, and I am simply grateful that my talk didn't



AMEP alum Harry Luo presenting his thesis work at the APS March meeting

make them mad.

Further, I had the opportunity to also present it as a poster at the ECE undergraduate research symposium, and fortunately won the WQI Research Excellence Award. See [this LinkedIn post](#) for details!

Thanks to a funding from Trewartha Senior Honors Thesis Research Grant, I was able to turn this research to my senior honors thesis to satisfy the Honors in the Major requirements for my physics major. I took it as an opportunity to fill the many gaps I had in bosonic quantum information, on which our work was based. I presented my thesis at the Honors Thesis Symposium. My advisor, Matthew Otten, was given the Excellence in Honors Thesis Advising Award at this event as well!

AMEP has, in many ways, shaped who I am, and its spirit—one that demands intellectual fearlessness and rewards cross-domain agility—will live in me for many new chapters to come.”

Other News

COMAP MCM Winners

In February, Jason Dong, Ryan Gao and Yanjun Yang competed in the COMAP Mathematical Contest in Modeling. The problem? Estimate hidden fan votes in the TV show Dancing with the Stars, even though the actual voting data was not made available. They earned an ‘Outstanding’ ranking (the first team from UW-Madison ever to have done so), placing them among the top 41 (unranked) out of 32,213 teams in the world!

The department has fielded 70 teams since 2012, and has been supported in large part by donations from alumni of the AMEP degree program.

Squishy Science Sunday



Prof Spagnolie with UW-Madison participants including AMEP alum Michael Zhao

This March, over 12,000 scientists convened at the Global Physics Summit of the APS (American Physical Society). “Squishy Science Sunday” is a public outreach event which is held each year on the day before the meeting. Over 1,500 people of all ages came to the Denver Museum of Nature and Science to explore a wide array of interactive experiments, and to talk to the 150+ faculty and student volunteers. There were audible gasps from the attendees, and a “MY GOD” from one five year old.

The UW-Madison Mathematics contingent was led by Yue Sun, a postdoc in the UW-Madison Mathematics Department, and supported by numerous graduate students and one undergraduate student from the AMEP Lab.



Applied Mathematics,
Engineering, and Physics
DEPARTMENT OF MATHEMATICS
UNIVERSITY OF WISCONSIN-MADISON

Thank you for reading! We appreciate the support of our AMEP community and love sharing your news. Please reach out to amep@math.wisc.edu with anything you'd like us to feature in the next edition of this newsletter. On, Wisconsin!



A piece from Yue Sun's fluid dynamics research in the AMEP Lab