

Department of Physics and Materials Science

Spring 2024 Newsletter

Dear friends, colleagues, and alum,



Once again I am very pleased to be able to bring to you a summary of the accomplishments and achievements of our faculty and students from the spring semester. We had a very busy and successful semester with a lot to be proud of!

Firouzeh Sabri, Professor-Chair

Research Featured in ACS Nano



Dr. Mohamed Laradji, recently published a paper featured on the ACS Nano cover, reporting lipid vesicle self-assemble Janus nano rods into an amazing array of highly-ordered nanoclusters. Congratulations to Dr.

Mohamed Laradji, Dr. Hoang Thang, and former students Dr. Abash Sharma and Dr. Yu Zhu!

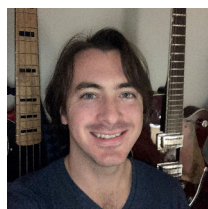
Faculty Granted Highest Honor



Dr. Sanjay Mishra was awarded the Willard R. Sparks Eminent Faculty Award. This is the highest distinction given to a faculty member by the University, and is bestowed annually upon one faculty member who has made outstanding and sustained contributions to

scholarly-creative activity, teaching, and service, bringing honor and recognition to the University. Congratulations, Dr. Mishra!

Graduation and Awards



We are pleased to announce **Bryson Krause's** (Advisor: **Dr. Thang Hoang**) successful completion of his Ph.D. dissertation and defense. Congratulations, Bryson!

We also recognize **Joseph Duncan, Jr.** and **Grayson Nelms** as they have completed their

bachelor degrees in physics. **Joseph Duncan, Jr.** received the CAS Dean's Award for Outstanding Undergraduate Student, the Outstanding Physics Student Award, and the Chi Beta Phi Science Award. Students **Qianshi Fu** and **Jacob Stewart** were awarded the Marchini Scholarship and Woollett Scholarship, respectively. **Jacob Stewart** was also awarded the Highest Physics GPA Award, and **Joseph Duncan, Jr.** and **Joseph Zeron** were named the best undergraduate researcher. Congratulations to all!

Student Named APS Ambassador



DPMS graduate student **Debendra Timsina** (advisor: **Dr. Firouzeh Sabri**) was selected as an APS Student Ambassador. Debendra will promote the professional development for his

peers at the UofM and engage with the greater physics community. Debendra also received the Celebration of Student Success Award from the UofM Graduate Student Association, acknowledging student accomplishments during this academic year. Congratulations, Debendra!

Students' Leadership Recognized



DPMS majors **Jacob Stewart** (top) and **Joseph Zeron** (bottom) were recognized for their Student Leadership Involvement at the President's Leadership Awards and Honors Assembly on April 16, 2024. Congratulations, Joseph and Jacob!

2024 Endowed Lecture

Mr. John Durning delivered the 2024 Lois McGlothlin Endowed Lecture in Physics on April 19. The lecture, entitled "The Making of the James Webb Space Telescope and Early Science Results," provided insight into the telescope's development and the advances in understanding the universe.

UofM Students Attend Regional Physics Symposium



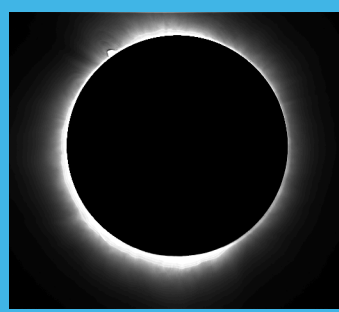
Debendra Timsina, Yagya Woli, Alisha Dhakal, and Himel Pohkrel presented posters at the Physics Research Symposium 2024 on April 14. This regional event provides graduate students in physics the opportunity to present their research and net-

work with their peers. The UofM is a participating institution among other universities in Alabama and Mississippi.

Solar Eclipse in Memphis



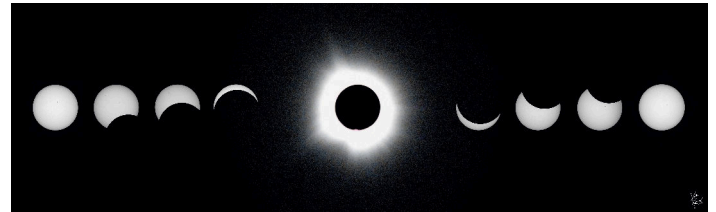
The UofM DPMS was actively involved in the eclipse celebration. **Dr. Benjamin Keller** coordinated a campus event featuring solar telescope viewing for the public. The event was well-attended by our campus community, with thousands gathering in the Student Plaza on the UofM campus to view the eclipse through the telescope and eclipse glasses, and sharing the experience — the last major solar eclipse over North America for two decades.



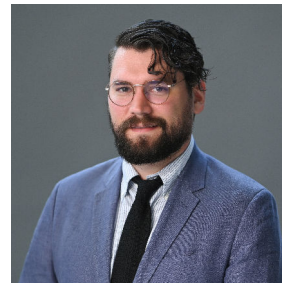
Members of the UofM DPMS, coordinated by **Dr. Francisco Muller Sanchez** and **Joanne Rhodes** travelled to Arkansas to witness totality. Joanne Rhodes illustrated speed of light at a scale of 10 bil-

lion to 1 using a robot.

DPMS graduate students **Kenneth Rymanowicz** and **Javier Saavedra Moreno** captured images of the eclipse as it progressed, and documented the event progression as shown in the collage below (and the image of totality on the opposite column.)



Faculty Awarded Grant for Astronomy Research



Dr. Benjamin Keller was awarded a grant by the Space Telescope Science Institute, STScI, which is operated by AURA. The grant will support Dr. Keller, a faculty member in the DPMS at the UofM, as he furthers his re-

search through a program titled “Teasing Apart the Effects of Radiation and SN Feedback in Simulated Observations of Dwarf Galaxies.” Congratulations, Dr. Keller!

Faculty Featured in Research in a Minute



Dr. Francisco Muller-Sanchez Our **Research in a Minute** series spotlights some of the most active and accomplished researchers across various disciplines at the UofM. Dr. Francisco Muller-Sanchez's **Research**

in a Minute focuses on the characterization of the environments around supermassive black holes using the most powerful ground-based and space-based telescopes. To watch the **Research in a Minute**, please visit <https://tinyurl.com/2bey7fj1>.



For up-to-date information, please visit our News page at memphis.edu/physics/news/index.php or view this and past **Newsletters** at memphis.edu/physics/newsletters/index.php or using the **QR Code** to the left.

For content-related questions, please contact Dr. G. Borstad at gustav.borstad@memphis.edu.