

# SUMMER ISSUE: JULY 1, 2024

## DEPARTMENT NEWS

### EVENTS

#### Belle II Summer Workshop

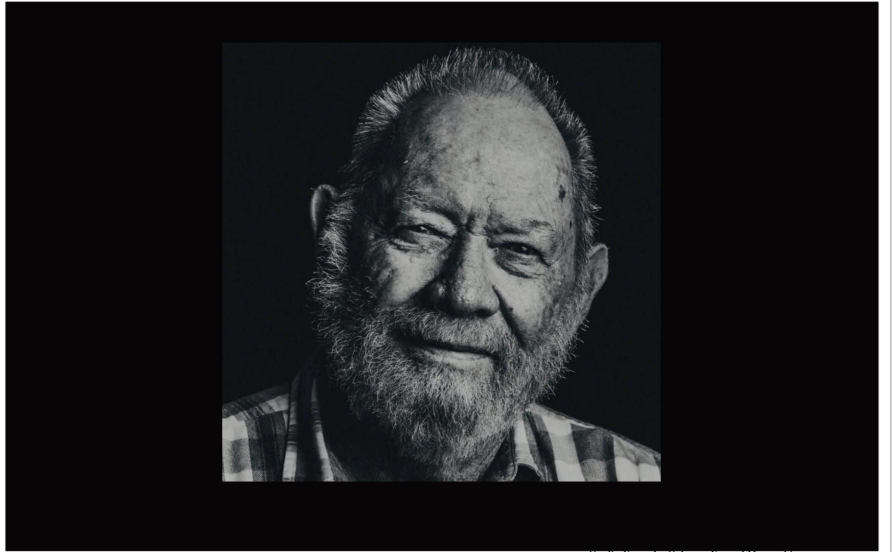
The US Belle II Summer Workshop, organized by a team led by Dr. Jake Bennett, was held at the University of Mississippi from June 17 to 21. The purpose of the workshop is to give students, postdocs, and senior researchers the tools and knowledge needed to get started and make progress on Belle II physics analysis and performance studies. Topics included Belle II physics, software, and computing in a hands-on tutorial format. The workshop featured Belle II Explorer, a public event that introduced the public to the physics and the detector.

#### Physical Acoustics Summer School (PASS)

The biennial Physical Acoustics Summer School (PASS), was held at the University of Mississippi from June 2 to 7. Dr. Joel Mobley is the director of PASS. Its purpose is to bring graduate students, distinguished lecturers, and discussion leaders together to discuss a wide variety of subjects in physical acoustics. 21 graduate students participated. 4 of the students, Xinyue Gong, Guoqin Liu, Sina Rostami and Ceu Neto de Jesus, were from UM. Other PASS committee members are Dr. Veerle Keppens, Chair of the Materials Science and Engineering Department at UT Knoxville (and former UM Physics faculty member) and Dr. Preston Wilson, Professor of Mechanical Engineering and Associate Research Professor at Applied Research Labs at UT Austin.

#### QuarkNet Workshop

The 2024 QuarkNet Workshop was held from June 27 to 28. QuarkNet, which has been running for decades, is for high school teachers from regional schools to learn more about ongoing research on campus. This year's workshop featured presentations by faculty and students in the Center for Multimessenger Astrophysics. Faculty presenters were Drs. Gavin Davies, Breese Quinn, Anuradha Gupta and Nicholas MacDonald and student presenters were Kaitlyn Thurmond and Byungchul Yu. Dr. Davies hosted a particle physics masterclass with data from the NOvA experiment and gave a tour of the virtual control room for the experiment.



Credit: From the Coleman Funeral Home obituary

### General Department News

**Remembrance:** Dr. Roy Turner Arnold, Emeritus Professor in the University of Mississippi Department of Physics and Astronomy, passed away on Sunday, April 28, 2024, at the age of 91. Dr. Arnold was born on March 27, 1933, and grew up in Jackson, Mississippi. He attended the Raymond Agricultural High School affiliated with Hinds Junior College (HJC) which allowed him to start taking advanced math and science classes. After finishing at HJC, he continued his academic pursuits at Millsaps College where he studied chemistry, mathematics, and physics. He applied and was selected for a National Atomic Energy Fellowship which gave him the opportunity to study nuclear physics at Vanderbilt. He received both his Master's degree and Ph.D. from Vanderbilt. While at Vanderbilt, he was assigned to work on the new Cockcroft-Walton accelerator. Dr. Arnold taught physics at UM for nearly 25 years before he retired in 1987. His professional career ended with significant contributions to the study of lightning and thunderstorms. He was co-founder of the Physical Acoustics Research Group at the University of Mississippi (PARGUM). Dr. Arnold took leave from the University in 1985 to head up the Diagnostic Instrumentation Division for the Institute of Technology Development (ITD). His work at ITD contributed to the National Center for Space Remote Sensing, the National Center for Physical Acoustics (for which he was honored as a Founding Father), and the expansion of the microelectronics division at Mississippi State University. After his retirement, he applied the laws of physics to automobile accidents working with both plaintiff and defense attorneys and insurance companies for about a decade. For years he had played golf at the Oxford Country Club and Ole Miss, but once he "retired", he could be found every weekday on the Ole Miss Golf Course for his 11:00 am tee time with friends. He was officially honored a few years ago as a Legend of the Ole Miss Golf Course. During his last years he came to believe and was focused on the thought that we are all co-creators with a purpose to create. He was fascinated with what scientists would conclude from information gathered by the James Webb Space Telescope. He was sitting on ready to ask, "How could you possibly conclude that?" He would be honored if you reflected on yourself as a co-creator and queried any findings and conclusions from the Webb Telescope. (Adapted from his obituary)

- Dr. Breese Quinn was appointed to serve as a member of the High Energy Physics Advisory Panel (HEPAP) for a term of three years by the Department of Energy (DOE) and the National Science Foundation (NSF). The Panel was established in 1967 to provide advice and recommendations on scientific, technical, and programmatic issues relating to the High Energy Physics (HEP) program. Dr. Quinn is the first HEPAP member from the state of Mississippi.