

IN MEMORIAM

GERALD "JERRY" W. HOFFMANN

Jerry Hoffmann, our colleague and friend, was the quintessential experimental nuclear physicist. He applied his impressive scientific skillset to everything he did: in experimental physics, in project management, in teaching, in training graduate students and postdocs, and in his many departmental administrative responsibilities.

Jerry began his career by earning a Bachelor of Arts in Physics from Occidental College in Los Angeles in 1966. After spending one year at the University of Chicago, he transferred to the University of California, Los Angeles (UCLA) where he found his mentor Professor George Igo, a remarkably energetic and active experimental nuclear physicist. One of Jerry's projects at UCLA was to design a high-resolution proton magnetic spectrometer. After receiving a Ph.D. in 1971, he came to the Center for Nuclear Studies at The University of Texas at Austin as a postdoctoral scholar. He realized that he needed to go his own way from the very beginning, and had a scattering chamber on his beam line in an incredibly short time. In the four years the Center remained open, he published nineteen journal papers on nuclear structure studies with direct nuclear reactions. After only one year at UT Austin, he was appointed as an assistant professor in the Department of Physics. He became a full professor in 1984.

At the time Jerry came to The University of Texas at Austin, the experimental group at the Center for Nuclear Studies was focused strongly on the recently discovered isobaric analog states of nuclei. His first four published papers, from UCLA, dealt with the study of these states, and it was mainly for this reason that he was hired at UT Austin. However, he quickly expanded

his focus and used a wide variety of direct nuclear reactions to study numerous facets of nuclear structure, in close collaboration with the active theory group of the Center for Nuclear Studies.

In 1975, Jerry joined the Los Alamos Meson Physics Facility (LAMPF), a linear accelerator producing seven hundred to eight hundred MeV protons. The facility had a High Resolution Proton Magnetic Spectrometer (HRS) that was not performing at design specifications. Jerry quickly suggested, and had carried out, major improvements which converted the HRS into a practical research tool. His achievements were noticed by the Los Alamos administration, which offered him a temporary appointment as a staff member. He got a leave of absence from UT Austin and was immediately involved in enormously productive studies of the matter distribution of neutrons in nuclei, using the facility. He was not only responsible for the operation, maintenance, and improvement of the HRS over these years, he was its most effective user and also served as the physics liaison for the increasingly large group of HRS users from universities all over the United States. His ability to keep the peace among a diverse group containing members who were sometimes highly excitable and easily offended was an early indication of his impressive talents as an administrator. He returned to UT Austin in 1980, while continuing to carry out experiments at LAMPF until the early 1990s. During that time, he initiated two complex experiments for LAMPF—one required a polarized target, the other a high precision device for measuring absolute cross sections. These required large-scale construction efforts from the Machine Shop of the Physics Department that resulted in a close, decades-long relationship between Jerry and the Machine Shop personnel. Jerry was very particular about every technical detail of his shop projects. He often wanted “non-standard” projects done to meet his vision of how things needed to be. Shop staff often joked about getting a “Hoffmann project”. It always meant very exacting and often unusual requirements. It also

meant frequent Hoffmann visits to the shops to check on progress. Jerry often stated that his success as an experimentalist was largely due to the third-floor Mechanical Section.

In the early 1990s, Jerry's research interests turned to studies of head-on relativistic nucleus-nucleus collisions using the Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory. Jerry joined the Solenoidal Tracker at RHIC (STAR) Collaboration and quickly became a member of the detector development group building a silicon vertex tracking device for the STAR experiment. He took charge of the read-out electronics for the project, delivering state-of-the-art electronics devices for the experiment. His passion for building new detectors led to the development of read-out electronics for the new, time-of-flight, particle-identification system for STAR. Jerry managed the assembly and testing of the entire system, one hundred twenty trays, in his laboratory at UT Austin. Following the success of this work, he took over the read-out electronics and assembly of another large-scale detector system for STAR, this one designed to detect muons from the collisions. His last project was a large-scale construction project of aluminum support structures for the Heavy-Ion experiment ALICE (A Large Ion Collider Experiment) at the Large Hadron Collider at the European Organization for Nuclear Research, also known as CERN, in Switzerland.

To the end, he remained passionate about doing precision detector development work of the highest quality. It was never about building devices that were merely "good enough," but building hardware and electronics that were the best they could possibly be and putting in the long, tedious hours to make them so. He was equally passionate about the research group he had built up at UT Austin over four decades and the group's success and survival in the competitive funding environment of nuclear physics. He built a legacy in the fundamental research he

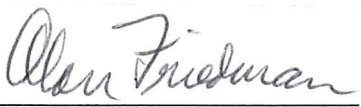
contributed to science and in the many scientists he mentored over his long and productive career.

Besides his distinguished research contributions, Jerry Hoffmann contributed significantly to the teaching and administrative operations of the Physics Department and the University. Jerry was our go-to guy for facilities issues. He served on major renovation committees, communicating with Physical Plant and contractor staff about the technical needs of the department. In this role, he was appointed as a Fellow on the Elizabeth B. Gleeson Professorship in Physics. He was our Safety Officer for the last few decades, and for the last several years, he chaired the department's Faculty Recruitment Committee.

Jerry was among our most successful teachers. He brought the same dedication to the classroom as he did to his research interests. For several years, he was the only person teaching our special sections of Engineering Physics for Honors students. He was recognized for this work by being appointed to the Marian Harris Thornberry Professorship in Physics for several years. His excellence in the classroom was recognized twice with the Teaching Excellence Award from the College of Natural Sciences in 2003 and 2011.



Gregory L. Fenves, President
The University of Texas at Austin



Alan Friedman, Secretary
The General Faculty

This memorial resolution was prepared by a special committee consisting of Professors Christina Markert (Chair), Austin M. Gleeson, and Peter J. Riley.