



IN MEMORIAM

Benjamin Ching- Chun Shen
Distinguished Professor of Physics
UC Riverside
1938 - 2007

Distinguished Professor of Physics Benjamin C. Shen died from cancer on July 12, 2007 after 38 years of service at the University of California, Riverside. He will be remembered as a versatile and effective physicist with exceptional vision and personal skills. He was instrumental in the founding of the experimental high energy physics group at UCR and the building of the UCR Department of Physics (now Physics and Astronomy). Within the high energy physics community, he was well known as an effective and affable group leader with a focus on experimentation at the Stanford Linear Accelerator Center (SLAC) and the European Center for Nuclear Research (CERN). His sense of humor, integrity, good nature and taste for life were contagious. He will be missed by his many friends and colleagues.

Born in 1938 in Shanghai China, Ben's early life was marked by the tumultuous events of that era. With his parents and three siblings, he moved repeatedly throughout southern and western China to avoid the conflicts then ravaging the country. The family eventually settled in Taiwan in 1949. After graduating from Chien-Kuo High School in Taipei in 1954, Ben came to the U.S. in 1956 with a scholarship to study at Providence College in Rhode Island. The next year, he transferred to the University of California, Berkeley, where he earned his bachelors degree in 1959 and Ph.D. in 1965, both in physics. His graduate research was directed by Gerson Goldhaber. His thesis dissertation was on resonance production in pion- proton interactions at the 20 inch bubble chamber at Brookhaven National Laboratory and the 72 inch bubble chamber at the Radiation Laboratory, now the Lawrence Berkeley National Laboratory (LBNL). In particular, he participated in the discovery of the A_2 [now called $a_2(1320)$] meson. While at Berkeley, he met his future wife Mayling Cheng. They were married in 1963.

After earning his Ph.D., Ben worked for two years as a research associate at LBNL, then for two additional years as a research associate at SLAC. During this latter period, he studied collisions of neutral long- lived K-mesons with protons and electron- beryllium interactions at the SLAC hydrogen bubble chamber. In 1969 he joined the young Department of Physics at UC Riverside. The focus of his work then shifted to CERN and to proton- proton diffractive physics at the Intersecting Storage Rings. In the early 1980's he moved his group back to SLAC, becoming deputy spokesperson and then spokesperson of the TPC- PEP4 experiment where his physics interests centered on two- photon interactions. As spokesperson of the TPC- PEP4 experiment, he oversaw the crucial transition period between the detector- building and data- analysis phases.

Foreseeing future developments, Ben joined the OPAL Collaboration at CERN in 1986. His group's interests ranged from studies of the Z boson line shape, to tau lepton physics, to searches for New Particles. In the early 1990's, when many U.S. high energy physics groups planned efforts at the subsequently- canceled Superconducting Super Collider, Ben was convinced that the physics could be done more effectively at the Large Hadron Collider (LHC) being proposed for CERN. He led his group in a research and development project at CERN to explore technologies for muon detection at the LHC. He played a leading role in early American participation at the LHC: UCR was one of only four U.S. institutions to be a founding member of the Compact Muon Solenoid (CMS) experiment. Reflecting his longtime interest in electron- positron annihilation physics, Ben joined the BABAR Collaboration at SLAC in 2002, then splitting his activities

between BABAR and CMS.

Ben served as chair of the UCR Physics Department three times: 1988-1990, 1991-1993, and 2003-2005. The first period, broken by a one- year sabbatical leave, resulted in a period of sustained departmental growth, with the addition of many of the faculty members who now form the backbone of the Department and its programs. He was able to accomplish this in spite of continuing budgetary challenges and the shock to the Department made by the VERIP early retirement program of the 1990s, which severely reduced the size of the Department. Ben's central leadership role in the Department was continuous from the 1980's until his death. During his second period as department chair, he oversaw the beginning of unprecedented growth in both undergraduate and graduate student enrollment and faculty size that continues to this day. As Chair he was deeply involved in instructional program development and course design, and showed great skill in shepherding program changes through the academic process. His personal charm and boundless energy (coupled with irrefutable arguments) were essential to the success of these initiatives and to his considerable service to the campus and the university.

Ben's honors included election as a Fellow of the American Physical Society, the American Association for the Advancement of Science, and as a foreign member of the Academy of Science of the University of Bologna. He held appointments as a visiting scientist or visiting professor at many institutions, including CERN, the Jet Propulsion Laboratory (JPL), and the National Central University of Taiwan. He was a member of the University Research Association Board of Overseers for Fermilab from 1997 to 2002, and served on many UCR campus and university system- wide committees. A single example in addition to this outstanding and tireless committee service: he was involved in bringing a number of physics Nobel Laureates to the UCR campus to give lectures and in obtaining the necessary resources from the campus. For many years, he acted as an informal science advisor to the late Congressman George Brown.

Ben's vision helped to guide the growth and development of the UCR Physics Department for a quarter of a century. He was a highly valued mentor for many generations of students, postdocs, and junior faculty.

He is survived by his wife Mayling, his two daughters Katherine and Christine, and five grandchildren.

Bill Gary (chair), Doug MacLaughlin, and Sun- Yiu Fung
UCR Department of Physics and Astronomy