

cation began in 1963 with his service, including as both executive secretary and chairman, on the Commission on College Physics. He entered the presidential chain of the American Association of Physics Teachers (AAPT) in 1971 and served as its president in 1973–74. From that time there was never a year in which he did not participate on an AAPT committee. Along with his official responsibilities in AAPT, he held positions of leadership with the American Institute of Physics, the Educational Testing Service, and the National Research Council Board on Physics and Astronomy. Len also served on the US Liaison Committee for the International Union of Pure and Applied Physics from 1981 to 2000 and was influential in the International Commission on Physics Education, for which he was secretary in 1984–86 and chairman in 1986–93.

More significant than his record of official service was the personal support and encouragement Len extended to the physics education community. He strongly believed that physics education research groups should be located in physics departments. He cared deeply about the preparation of physics teachers at all levels.

During his 33 years at Ohio State, Len helped the physics department grow in quality and reputation. It gained a national and international name as a top research department that emphasized exemplary teaching. Part of Len's legacy is that the introductory physics course is taught by full professors and that for years new graduate students took a teacher assistant training course, which carried graduate credit, before moving to the classroom. Even after his retirement and up until his death, he could be found in his campus office from 8am to 5pm if he was not traveling. Although he was known for his exceptional mentorship of both faculty and students, we believe Len was happiest when working with students. He seemed to have that special gleam in his eye when surrounded by them, demonstrating one of the many toys he kept in his office and often challenging misconceptions students held about fundamental science principles. Len played a major role in establishing Ohio State's Physics Education Research Group and was an unofficial adviser to every graduate student from the group's inception until his death.

Of his many awards, Len particularly cherished three. In 1985 he was the second recipient of the AAPT Melba Newell Phillips Medal. He especially

valued it because of his lifelong friendship with Phillips. Len also received the 1994 Oersted Medal, AAPT's highest award. The third, the 2001 Ohio State University Distinguished Service Award, expressed appreciation from the school he had served for more than 50 years.

Many are aware of Len's contributions to physics and physics education. Relatively few know of his generous financial contributions to the Ohio State physics department. Fewer still know of the significant monetary contribution he made at a difficult time that enabled AAPT to meet its payroll. Those actions characterized a man who went beyond professing to care and actually put his words into action.

Len was an exceptional student of physics, a master teacher, and a gentleman. As his colleagues and friends, we miss his good advice, his presence at meetings, the many conversations in which he expressed his concern for us, and, especially, his witty remarks. Most of all, we remember his subtle wit.

Lillian C. McDermott
*University of Washington
Seattle*

James H. Stith
Mitchellville, Maryland

William Delany Walker

William Delany Walker, James B. Duke Professor of Physics emeritus at Duke University, died of cancer in Durham, North Carolina, on 8 April 2010.

Bill was born on 23 November 1923, raised in Dallas, Texas, and went to Rice Institute (now Rice University) in Houston, from which he obtained his undergraduate degree in physics in 1944. After being commissioned as an officer in the US Navy, he worked on far-IR detection at the US Naval Research Laboratory until the end of World War II. He then went to graduate school at Cornell University and studied with Richard Feynman, Hans Bethe, and his thesis adviser Kenneth Greisen. His thesis on cosmic-ray physics, entitled "A Study of Penetrating Showers," earned him his doctorate in 1949.

After teaching briefly at Rice, at the University of California, Berkeley, and at the University of Rochester, Bill took a faculty position with the physics department at the University of Wisconsin. There he had a distinguished career, building up the high-energy physics program based on the cutting-edge technology of the time, bubble chambers. He served as department

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chairman for two years and, in recognition of his contributions to experimental high-energy physics, was awarded the Max Mason distinguished professorship.

In the early 1960s, Bill codiscovered the rho meson, one of only a few subatomic particles then known to exist. It was eventually realized that the rho meson was an excited state of the lowest-mass strongly interacting particle, the pion. The discovery, along with other observations of excited states of hadrons, led to the formulation of the $SU(3)$ flavor symmetry of mesons and baryons. Bill was also project director for the construction of the 30-inch hydrogen bubble chamber that was used for many years of physics at Argonne National Laboratory and later for early experiments at the Fermilab Tevatron.

In 1971 Bill went to Duke University, where he again built up an experimental high-energy physics group and served two terms as chairman of the physics department. He continued making innovative contributions to elementary particle research through the use of hydrogen and heavy-liquid bubble chambers. Duke recognized his long and productive research career by awarding him a James B. Duke Chair.

Bill had many interests in addition to



William Delany Walker

DUKE UNIVERSITY PHYSICS DEPARTMENT

experimental high-energy physics, yet his life formed an integrated whole. In his mid-thirties he experienced a radical conversion to Christianity, in part as a result of his physics research. Being a true academic, he decided to take seminary courses—he later jokingly referred to that work as earning his “merit badge in theology”—and was ordained in the Episcopal Church. Over the years he served in the leadership of a number of evangelical congregations. Bill and

his wife, Constance Kalbach Walker, a senior research scientist at Duke, were often called on in both church and academic settings to explain the harmony that exists between the Biblical and scientific perspectives on creation and on the world around us. They eventually coauthored a booklet on the subject.

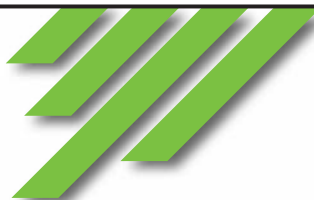
His technical knowledge, combined with a genuine concern for the welfare of society and the environment, led Bill to be a vocal advocate for the safe and responsible use of nuclear energy. He was also an outstanding athlete; he had been the top tennis player on his college varsity team and continued winning state and local tournaments until he was in his early eighties. He remained an avid player until a few months before his death.

Bill will be remembered not only for his numerous scientific achievements and strong faith but also as a man of gentle strength, deep wisdom, genuine concern for others, and amazing perseverance.

We thank Constance Kalbach Walker for her numerous contributions to this obituary.

Alfred T. Goshaw
Duke University
Durham, North Carolina

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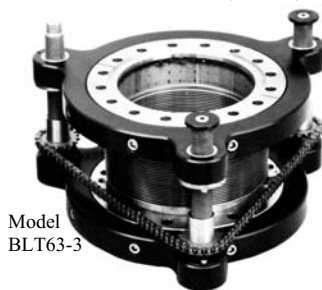


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