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Arthur M. Wolfe (1939–2014)

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**Arthur M. Wolfe died on Monday,
February 17, 2014 at age 74.**

Arthur M. Wolfe, an American astrophysicist who for a decade directed the Center for Astrophysics and Space Sciences at the University of California San Diego and achieved widespread recognition for his discoveries about star formation and the early universe, died on February 17 following a battle with cancer, in La Jolla, California. He was 74.

“Art Wolfe was a big thinker,” said Mark Thiemens, dean of the Division of Physical Sciences. “He wrestled with understanding how galaxies were formed and evolved. And he peered back in time 10 to 15 billion years to develop new ideas about the early universe. He was a leading force at the Center for Astrophysics and Space Sciences. All of us on campus benefited from his presence, research and leadership.”

Photo courtesy of Linda C. Scott.

Trained as a theoretical physicist, Wolfe made fundamental contributions in two different fields. In theoretical general relativity, he and Rainer Kurt Sachs first showed how density fluctuations in an expanding universe affect the thermal radiation left by the Big Bang, the cosmic microwave background radiation. Later, Wolfe moved into observational astronomy and was one of the key leaders in using the Keck Telescope in Hawaii, pioneering the use of quasar spectra to study concentrations of neutral hydrogen gas in “Damped Lyman-Alpha Systems.”

“The first of these two major contributions, known as the Sachs-Wolfe effect, has been a key tool used by cosmologists to derive much of what we know about the properties of the universe as a whole,” said George Fuller, a professor of physics at UC San Diego and the current director of CASS, the Center for Astrophysics and Space Sciences. “The second, sustained over more than two decades, led to new insights into how

galaxies, stars and the elements form, and concomitantly to the mentoring of many young scientists.”

“Art was a true leader in the fields of cosmology and extra-galactic astronomy,” said J. Xavier Prochaska, a professor of astronomy and astrophysics at UC Santa Cruz who, as a former graduate student, was one of the many prominent scientists Wolfe had mentored. “He influenced the research of hundreds of colleagues with his deep physical insight and was a terrific mentor to young researchers.”

Born in Brooklyn, New York on April 29, 1939, Wolfe received his B.S. degree in physics in 1961 from City College of New York’s Queens College, was awarded an M.S. degree from the Stevens Institute of Technology in 1963 and completed his Ph.D. at the University of Texas at Austin in 1967. Following postdoctoral work at UC San Diego and University of Cambridge and an exchange fellowship at the Lebedev Physical Institute in Moscow, he began his academic career at the University of Pittsburgh in 1973, rising from an assistant professor of physics and astronomy to full professor in 1982. He left Pittsburgh in 1989, accepting a professorship in the Physics Department at UC San Diego, and becoming director of CASS in 1997. In addition, he held the endowed Chancellor’s Associates Chair of Physics professorship from 1997 until his retirement in March 2013.

The American Academy of Arts and Sciences named him a Fellow in 1995, and he was the recipient of a Sackler Fellowship at the University of Cambridge in 2004 and 2007. In 2008, he won the prestigious Jansky Prize Lectureship, awarded by the National Radio Astronomy Observatory, and he was elected a Fellow of the American Association for the Advancement of Science in 2012.

Always enthusiastic about his work, Wolfe also had a wide range of interests in his personal life. He was passionate about politics, was an avid swimmer on campus and spent many happy hours walking among the redwoods on trails in Big Sur. He especially appreciated the creative spirit found in the literary works of Shakespeare, the music of Beethoven and many films. He was also a great fan of jazz and always enjoyed attending the theatre.

He is survived by his wife, Linda Scott; a son, David Wolfe of Los Angeles; a daughter, Diana Wolfe, M.D., of New York; and a granddaughter, Chloe Eve Wolfe. He was preceded in death in 1995 by his first wife of 30 years, Constance Eve Taylor Wolfe.

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