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John Gatenby Bolton

6 July 1993, at the age of 71.

Bolton was born in Sheffield, UK, in 1922 and studied physics at Trinity College, Cambridge. He began his research in radio astronomy in 1946 at the Australian Commonwealth Scientific and Industrial Research Organization's Radiophysics Laboratory.

In 1948, with Gordon Stanley and Bruce Slee, Bolton detected the first discrete cosmic radio sources and identified them with external galaxies and the Crab nebula. This important result played a major role in the recognition by the international astronomy establishment of the new field of radio astronomy and opened the door for the expansion of astronomical observations throughout the electromagnetic spectrum.

In 1955 Bolton came to the United States, where he developed the very successful radio astronomy program at Caltech. While there, he built a novel radio interferometer in California's remote Owens Valley. With this instrument he and a series of young colleagues and students made the first systematic studies of the structures, spectra, accurate positions and polarizations of hundreds of discrete radio sources, which led to their optical identification. These radio sources included the most distant galaxy then known, 3C 295.

After returning to Australia in 1961, Bolton supervised the construction and served as the first director of the 210-ft radio telescope at Parkes, New South Wales. Under his direction, the telescope was used for many major discoveries. Among these were crucial observations of the radio source 3C 273 that led to the recognition of quasars

by Maarten Schmidt. For several years Bolton devoted much of his time to adapting the 210-ft radio telescope to support the Apollo Moon missions. Bolton was particularly proud of the fact that Neil Armstrong's first walk on the Moon was viewed around the world via the Parkes radio telescope. He also played a key role in the design and construction of the Anglo-Australian 4-meter optical telescope near Coonabarabran, New South Wales.

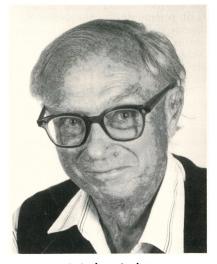
John Bolton's role in the growth of radio astronomy over more than three decades was seminal. Perhaps even more important than his published works were his forceful leadership in the development of new techniques, ideas and instruments, and the encouragement and guidance he gave to his students and younger associates. He will be remembered by his colleagues as a good friend, a distinguished scientist and a caring teacher.

KENNETH KELLERMANN National Radio Astronomy Observatory Charlottesville, Virginia

L. Jackson Laslett

Lawrence Jackson Laslett died on 7 May 1993 in Berkeley, California. During his long and splendid career in physics, he had made important contributions to a wide variety of fields, but most importantly to the design of particle accelerators.

Laslett was born in Boston on 12 January 1913 and raised in Pasadena, California. He completed his undergraduate education at the California Institute of Technology and did his graduate work at the University of California, Berkeley, under Ernest



L. Jackson Laslett

WE HEAR THAT

Lawrence. He was a key figure in the development of the first cyclotrons; with Sten von Friesen, he built the first European cyclotron in Copenhagen. While a professor at Iowa State University (1946–63), Laslett made many significant and meticulous contributions to weak-focusing synchrotron design. As a participant in the Midwestern Universities Research Association he was a leader in the development of alternatinggradient focusing theory, the concept of colliding beams and nonlinear orbit theory. Laslett was also a pioneer, with James Snyder and Richard Christian, in the use of digital computers for calculating electromagnetic fields from Maxwell's equations. He also used computers to study particle orbits and to show that there is a real phenomenon of chaos.

Laslett served the government in many ways. During World War II he worked at the MIT Radiation Laboratory on the development of airborne radar. He was a member of the Office of Naval Research in both Washington (1952–53) and London (1960–61), and he was the first head of the high-energy physics branch of the Atomic Energy Commission (1961–63).

In 1963 Laslett went to Lawrence Berkeley Laboratory, where he continued to be a leading figure in accelerator design and theory. He made major contributions to the Electron Ring Accelerator, the Heavy Ion Fusion Accelerator program and the

subject of collective instabilities.

Laslett's contributions and influence were immense. While he was exceedingly quiet, he nonetheless shared his insights, work and perspective in such a way that a host of people in the field came to revere him as a mentor. He was a joyous person, always eager to work and to discuss physics. It was a great joy to work with him.

Francis T. Cole
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Lawrence Berkeley Laboratory
Berkeley, California
William A. Wallenmeyer
Rockville, Maryland
Daniel J. Zaffarano
Iowa State University
Ames, Iowa

Richard E. Cutkosky

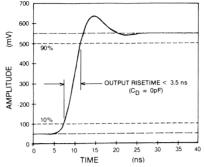
Richard E. Cutkosky, the Buhl Professor of Physics at Carnegie Mellon University, died on 17 June 1993 following a stroke. Born on 29 July 1928, he was 64 years old.



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