

To notify the community about a colleague's death, subscribers can visit <http://www.physicstoday.org/obituaries>, where they can submit obituaries (up to 750 words), comments, and reminiscences. Each month recently posted material will be summarized here, in print. Select online obituaries will later appear in print.

Fay Ajzenberg-Selove

Fay Ajzenberg-Selove, professor of physics emerita at the University of Pennsylvania, died on 8 August 2012 in Haverford, Pennsylvania. A prominent nuclear physicist, when she was awarded the National Medal of Science in 2007, she became one of the few female physicists to have received it.

Fay was born on 13 February 1926 in Berlin to Russian parents, and in 1930 she and her family moved to France. In 1940 they began a journey through France, Spain, Portugal, and Cuba before settling in New York City that December. Starting with nothing, Fay's father, an engineer and entrepreneur, became a millionaire three times—in Berlin, in Paris, and in New York—with hardships in between. He constantly encouraged Fay to become an engineer.

She earned a BS in engineering physics from the University of Michigan in 1946, then went to the University of Wisconsin and received an MS in 1949 and a PhD in physics in 1952. Her dissertation, under the direction of Hugh Richards, was "Energy levels of some light nuclei and their classification."

After a year as a lecturer at Smith College in Massachusetts, Fay became an assistant professor at Boston University. She was kind but tough. On the first day of her nuclear-physics class, Fay asked us to call her by her first name. Later she invited us to a party at her apartment and introduced us to Tom Lehrer's first record album. Another time, she arranged for the class to spend a weekend at Brookhaven National Laboratory. We had dinner with Sam Goudsmit, who with George Uhlenbeck had discovered electron spin; toured the Cosmotron and the nuclear-physics labs; and were briefed on plans for the Alternating Gradient Synchrotron. It seemed like a vacation until Monday morning, when Fay gave us a quiz. I got 33 out of 100, and my classmates had similar grades.

Before Fay had completed her PhD, she wrote to Thomas Lauritsen at Caltech and asked if she could work with him that summer in 1952 on a new version of the reviews he and his colleagues were writing on energy levels of light



Fay Ajzenberg-Selove

nuclei. Lauritsen neglected to tell the Caltech dean that "F. Ajzenberg" was a woman, and she became the first woman appointed to the physics department.

The review work began her 38-year effort to critically evaluate all the experimental results on the structure of light nuclei with mass number A from 5 to 20. She and Lauritsen collaborated on the reviews until his death in 1973, and she continued, alone, until 1990. Over that period she published 26 reviews—first in *Reviews of Modern Physics* and beginning in 1959 in *Nuclear Physics*. About 1400 papers on light nuclei were published in a typical year. The Institute for Scientific Information listed Fay's reviews as citation classics in 1979 and 1992.

Fay's own experiments in nuclear spectroscopy were done at accelerators at MIT, Princeton University, Indiana University, and Brookhaven, among others. Typically, she would decide to study the properties of a particular nucleus, call a friend at an appropriate accelerator, propose they work on the problem together, and then arrive with the required targets.

Fay married particle physicist Walter Selove in 1955. Two years later they settled in Philadelphia, where they both had found good jobs—Fay as an associate professor of physics at Haverford College, where she became the first tenured woman faculty member, and Walter as an associate professor of physics at Penn.

In 1970 Fay became a research professor in the Penn physics department.

In 1971 Fay was invited by the American Physical Society (APS) to organize a panel discussion on women in physics at its meeting in New York. Almost all of the 600 people who showed up were men. Panel members included distinguished women such as Chien-Shiung Wu and Henriette Faraggi. But with her usual insight, Fay also invited two eminent male speakers, D. Allan Bromley and Charles Townes. That successful meeting (see *PHYSICS TODAY*, April 1971, page 23) led to the founding of the APS Committee on the Status of Women in Physics. Throughout her career Fay was actively supportive of women in science and academia in general, especially at Penn.

Two years after arriving at Penn, with the advent of affirmative action guidelines, she applied to the physics department for promotion to full professor but was soundly rejected. Eventually she formally complained to the equal opportunity commissions in the federal and state governments. In 1973 the Commonwealth of Pennsylvania found a prima facie case of discrimination and ordered Penn to give her a full professorship with tenure; she became the second female professor in the Penn School of Arts and Sciences.

Fay was an enthusiastic, talented teacher. Her devotion to her students was legendary, and she was a mentor and good friend to many. She was my thesis adviser and then a close friend for the rest of her life. In 1999 she was awarded the APS Nicholson Medal for Humanitarian Service.

Because Fay spoke fluent Russian, French, and German, she played a major role in the international nuclear-physics community. In 1966 she was the first female member of an Atomic Energy Commission delegation to the Soviet Union. That same year she helped found the APS nuclear physics division, and she served as chair from 1973 to 1974, the first woman to head an APS unit. She was also instrumental in founding the Department of Energy/NSF Nuclear Science Advisory Committee. She was active in the International Union of Pure and Applied Physics and was chair of its commission on nuclear physics from 1978 to 1981.

Fay's autobiography, *A Matter of Choices: Memoirs of a Female Physicist* (Rutgers University Press, 1994), is an outstanding, moving account of her life as a physicist, teacher, and woman.

Gloria B. Lubkin
University of Maryland
College Park