

Frank Joseph Loeffler, Professor Emeritus in the Purdue University Physics Department and Fellow of the American Physical Society, died July 27, 2008, in Maui, Hawaii. He had a long and distinguished career as an experimental physicist and teacher.

In his own words he was "first a teacher", but to his colleagues he was an active and successful high energy physicist. During the '50s he and his students published on photodisintegration and pion photoproduction. In the '60s, with George Tautfest, he began a bubble-chamber film analysis group at Purdue. On Tautfest's death Frank managed that quite large group for a few years and shared in the publication of numerous early studies of resonant baryon and meson systems. During this time he spent a year as Visiting Professor at Hamburg University, where he worked at DESY.

In the early '70s, restless within the confines of physics using bubble chambers, Frank took a sabbatical at Heidelberg and worked on a CERN experiment to study weak interaction phenomena with K mesons. On his return he joined others in starting an active Purdue counter physics group, eventually leading to participation in the PEP-12 experiment at SLAC, where he spent several semesters. It was during this same period that at various times he served Argonne National Laboratory as a member of the ZGS Users Advisory Panel, and as a member of the Argonne Universities Association (AUA) Board of Trustees, and as chairman of the AUA Board Committee for High Energy Physics.

Subsequently Frank joined an early effort in gamma-ray astronomy using ground-based Cherenkov radiation detection. He helped build, instrument, operate, and later decommission gamma-ray telescopes on Mt. Haleakala on Maui, Hawaii, and it was then that he fell in love with the island he chose for his retirement.

In addition to teaching the usual mix of courses, he created a seminar on careers in physics for undergraduate majors, in which he invited guest physicists and ex-physicists from industry, academia, and national laboratories to discuss their experiences. This course continues to be an essential part of the undergraduate curriculum, serving an important role in the mentoring of Purdue students. Frank's teaching was rewarded in 1992 with the Purdue Physics Department's award for outstanding teaching of undergraduates, in part because of this seminar.

Frank's second home was his own laboratory, where he kept his "side experiments" going, and where students often helped. On a School of Agriculture farm he built an array of particle detectors, Yagi antennas, and magnetic detectors to study electrical signals from extensive air showers. He worked on the detection of ultra-low frequency electromagnetic waves. He designed, tested and set into operation new experiments to be introduced into student laboratories. At his home in Hawaii he built a laboratory in which he continued to create student laboratory experiments and pursue his interests.

Born in Ballston Spa, NY, on September 5, 1928, Frank received his B.S. in Engineering Physics and his PhD in experimental high-energy physics, both at Cornell, and spent a year as Research Associate at Princeton before coming to Purdue in 1957. He is survived by his wife, Jane, four children and six grandchildren.

- P. Palfrey and N.J. Giordano