Prandtl, Geoffrey Taylor and Theodore von Kármán, dealt with statistical averages that can be quantitatively measured. He and his school of students developed increasingly better methods of successive approximation—particularly that of successive substitutions, proposed by him in the late 1980s—to obtain quantitative results for comparison with experimental data. This work stimulated a great deal of new research in turbulence and chaos, some of which continues today. In 1982 he resumed publishing in relativity theory, after a lapse of 40 years.

As an influential leader and policy maker in education, science and technology, Chou served in many key positions. He was president of the Chinese Physical Society for more than 30 years, vice president of the Chinese Academy of Science, vice chairman of the Chinese People's Political Consultative Conference and a member of the National Committee of the National People's Congress. Active in international affairs, he served as China's chief delegate to the Pugwash Conference and negotiated the US–China scholarly exchanges during the 1970s.

Even during the Cultural Revolution, Chou was able to resist and block the anti-Einstein and antirelativity movement. Concerned about certain aspects of the project to build an enormous hydroelectric power plant on the Yangtze Gorges, he and many scientists and engineers pointed out the difficulties and offered alternative suggestions. He has been noted for his integrity, honesty and forthrightness. He will remain an exemplary model of a scientist who lived through the great and sometimes tumultuous changes in China.

C. C. LIN
Massachusetts Institute of Technology
Cambridge, Massachusetts

Monica Healea

Monica Healea, professor emeritus of physics at Vassar College, died on 11 May 1993 in Rhinebeck, New York.

Monica was born on 16 June 1899 in Uhrichsville, Ohio. She received her AB and MA degrees in physics from Bryn Mawr College, and her PhD in physics from Harvard College. She came to Vassar in 1933 and retired in 1962. During her 30 years teaching at Vassar, she became chairman of the physics department and published research papers on the interaction of electron beams with metal surfaces.

During World War II, Monica spent two years at MIT working on the development of the magnetron, the power source for an aerial navigation system. After the war she spent some months at Brookhaven National Laboratory while it was being established.

After her retirement from Vassar, Monica worked for several years with a group at Harvard, studying the atomic physics of the upper atmosphere.

Later in life she became an artist and showed her work in juried exhibitions and shows in Dutchess County and New York City.

DOANE DOUTHETT
Cedar Crest, New Mexico

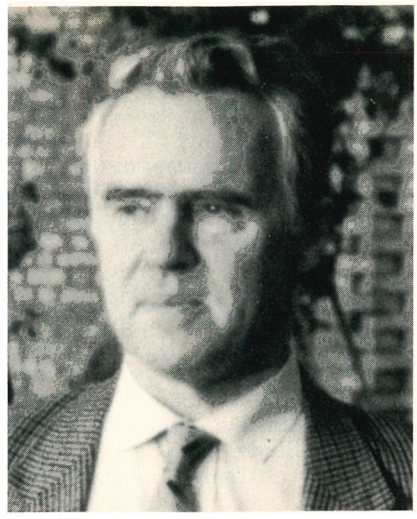
Alexander A. Pomansky

Alexander Alexandrovich Pomansky, known to most as Sasha, died suddenly on 9 April 1993. He had spent the last 22 years of his life building and developing the Baksan Neutrino Observatory near Mount Elbrus in the north Caucasus Mountains.

Sasha Pomansky was born on 6 May 1932 in Moscow. He received his undergraduate education in the physics department at Moscow State University, from which he graduated in 1956. He then began research at the Lebedev Physical Institute, concentrating on electromagnetic air showers. His early work involved including the Landau–Pomeranchuk effect in the calculation of showers.

From 1963 until his death he led the development of the Baksan station and its laboratory, playing a significant role in the construction and development of all the facilities there. Since 1971 he had been the head of the Baksan station. His research group constructed the first low-background chamber at Baksan, which enabled them to begin measurements requiring low radioactivity and cosmic-ray backgrounds.

Pomansky had an insatiable interest in solar neutrino research. He demonstrated deep insight in this area by proposing the technique of extracting germanium-71 from gallium chloride solution. This approach was experimentally tested at the Brookhaven National Laboratory and later successfully used by the Gallex collaboration in the Gran Sasso tunnel. The Soviet–American Gallium Experiment at Baksan uses a technology involving the concentration of extracted germanium chloride in aqueous solution that was also proposed by Pomansky. He had also investigated using an aqueous solution of lithium chloride as a solar neutrino target, an idea that was shown to be



Alexander A. Pomansky

a feasible experimental approach at Brookhaven National Laboratory.

Pomansky's interests in low-background measurements were broad and included tests of the conservation of electric charge, studies of double-beta decay, searches for violations of the Pauli principle and searches for cold dark matter. He was very active in many collaborations worldwide, but always remained focused on the continued development of the Baksan Neutrino Observatory and its scientific programs.

Sasha was very generous with his time to anyone who needed his help and advice. He was an open-minded person who had free entry to the doors of many institutions. He was especially thoughtful to colleagues with whom he had worked for a long time.

He was a serious scholar of art, poetry, history, literature and philosophy, and he himself exhibited genuine artistic talent.

Sasha Pomansky touched the lives of scientific colleagues and friends throughout the world. He will be missed professionally and personally by all who came to know him.

VICTOR A. MATVEEV
Institute for Nuclear Research
Moscow, Russia
FRANK T. AVIGNONE III
University of South Carolina, Columbia

Michael Francis Gormley

Michael Francis Gormley, a distinguished Fermilab physicist, died at his home in Wayne, Illinois, on 29 June 1993.

Born on 9 April 1939 in Somerville, Massachusetts, Gormley graduated from Boston College in 1960 with a

BS in physics. He obtained his master's degree in mathematics in 1964 at Trinity College and his PhD in physics in 1970 at Columbia University under Wonyong Lee. For his doctoral research Gormley tested *C* invariance. He then joined the faculty at the University of Illinois, Urbana.

While at Illinois, Gormley compared *CPT* violation in the decays $\overline{K}^0 \to \pi^+\pi^-$ and $K^0 \to \pi^+\pi^-$ using the Zero Gradient Synchrotron at Argonne National Laboratory. Gormley's insight led to the use of liquid deuterium in the E-87 experiment at Fermilab to filter out the neutrons and neutral kaons during production of a photon beam. In 1974 E-87 was thus able to photoproduce the J/Ψ particle, proving it to be a hadron. Gormley joined the E-400–E-401 photoproduction collaboration at Fermilab in 1975.

Gormley joined the Fermilab staff as head of the accelerator controls department in 1976, when the controls hardware and software for the Tevatron were being designed and built. In 1983 he joined the antiproton source department, where he used his knowledge of controls to design a sophisticated system for creating and maintaining the ultrahigh vacuum necessary to store antiprotons for long periods. Gormley oversaw target station operations for the antiproton source from 1977 to 1991, when he became head of the antiproton source department. He held that position until January 1993, when he joined the accelerator physics department.

Mike Gormley's colleagues remember him for his honesty, wit and genuine good nature.

JOHN PEOPLES JR
STEPHEN C. O'DAY
Fermilab
Batavia, Illinois

Laird D. Schearer

Laird Schearer, Curator's Professor of Physics at the University of Missouri, Rolla, died on 7 March 1993 in Paris, France, following a heart attack.

Laird was born on 26 November 1931. He obtained a BS in physics from Muhlenberg College in 1954 and earned a master's degree in physics from Lehigh University in 1958. In 1959 he joined Texas Instruments in Dallas, where he rose to the rank of senior scientist before leaving in 1971.

It was at TI that Laird began his immensely fruitful research on optical pumping in helium gas discharges. His work led to improved magnetometers—a profitable TI product line for over 30 years—as well as to a method