Subject: Report of Faculty Retirement

Action Requested: Adoption of Retirement Memoir

York-Peng Edward Yao, Ph.D., professor of physics in the College of Literature, Science, and the Arts, will retire from active faculty status on May 31, 2008.

Professor Yao received his B.S. degree from the University of California, Berkeley, in 1960, and his M.A. and Ph.D. degrees from Harvard University in 1963 and 1964, respectively. From 1964-66, he was a research associate at the Institute for Advanced Study at Princeton University. He joined the University of Michigan faculty as an assistant professor in 1966, and was promoted to associate professor in 1972 and professor in 1978.

Professor Yao’s research has focused on the theoretical description of the laws governing the interactions of elementary particles using the methods of quantum field theory. He was an early proponent of gauge field theories, realizing their relevance to the description of strong, weak, and electromagnetic interactions. He did seminal work on the structural and phenomenological aspects of this important area of research, and was the first to study the infrared or long distance behavior in gauge theories and its impact on the physics of strong interactions. Professor Yao’s most influential work was the theory of effective lagrangians and low energy manifestations of heavy particle effects. He realized very early that the description of low energy physics using the method of effective lagrangians was fundamental, and developed many of the important tools used in this area. Using these methods, he pioneered the calculations for physical observable precision to a high degree in the context of the Standard Model for particle physics. His calculations won the praise of many in the field, as they provide a basis for the search for new physics beyond the Standard Model.

A dedicated teacher and instructor of students at all levels, Professor Yao was most known for his rigorous graduate level courses. He served on more than 30 graduate student thesis committees and chaired four committees.

The Regents salute this distinguished scholar by naming York-Peng Edward Yao professor emeritus of physics.

Requested by:

Sally J. Churchill, J.D.
Vice President and Secretary of the University

May 2008