

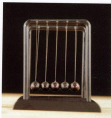


YOUNG SUH KIM

Dr. Young Suh Kim, Ph.D., is a Professor Emeritus of Physics at the University of Maryland.

Inspired by Albert Einstein, he decided to pursue a career in Physics. In 1956, he earned a Bachelor of Science in Physics from the Carnegie Institute of Technology (now known as Carnegie Mellon University in Pittsburgh, Pennsylvania). Subsequently, Dr. Kim obtained a Ph.D. degree in Physics from Princeton University and served as a postdoctoral fellow until 1962. At the request of John S. Toll, Chairman of the Department of Physics at the University of Maryland, Dr. Kim joined the faculty of the University of Maryland. From 1962 to 1987, he studied as an assistant, associate, and full professor and became a full professor of physics at the institution in College Park, Maryland. In 1987, he attained emeritus status after 45 years of impeccable contributions.

Devoted to research, Dr. Kim is the author of "Observable Gauge Transformations in the Parison Picture," published in *Physics Review Letters* in 1989. In 2020, he published a paper entitled "Quantum Mechanics of Moving Bound States" in the *Journal of Modern Physics*. With his younger co-authors, Dr. Kim contributed many articles to professional journals. His recent articles include "Poincaré Symmetry from Heisenberg's Uncertainty Relations" published in *Symmetry* (2019), and "Integration of Dirac's Efforts to Construct a Lorentz-covariant Quantum Mechanics," published in *Symmetry* (2020). Dr. Kim, with his younger co-authors, published many books on the subject of quantum mechanics valid in Einstein's relativistic world. His latest book is entitled "Physics of the Lorentz Group, Second Edition," published in 2021 by the British Institute of Physics. The co-authors of this book are Jilid Bakula and Marilyn Mox.



One hundred years ago, in the early years of the 20th-Century Niels Bohr was interested in the electron orbits of the hydrogen atom, leading to quantum mechanics. Albert Einstein was interested in how things appear to moving observers. This became his special theory of relativity with $E=mc^2$. There arose the question of how the hydrogen atom looks to moving observers. This question was left unanswered until 1977 when Dr. Kim, with Marilyn Mox, published his paper entitled "Covariant Harmonic Oscillators and the Parison Picture in Physical Review D. Later, in 1989, Dr. Kim reinforced this work by publishing his paper entitled "Observable Gauge Transformations in the Parison Picture" in *Physical Review Letters*. The issue has been whether the present form of quantum mechanics is compatible with Einstein's special relativity. These days, Dr. Kim's main interest is to see whether these two theories can be synthesized into one theory. The question is whether the equations of these two different theories can be derived from one basket of more fundamental equations. With his younger colleagues, Dr. Kim is publishing many papers along this line. His recent article is entitled "Einstein's $E=mc^2$ derivable from Heisenberg's Uncertainty Relations" which was published in *Quantum Reports* (2019).

Dr. Kim was inspired by the early papers of Paul A. M. Dirac (1902-84) and Eugene Wigner (1902-95), who pioneered the subject of constructing quantum mechanics valid in Einstein's relativistic world of space and time. In 1962, thanks to John S. Toll, who was the chairman of the Physics Department at the University of Maryland, Dr. Kim was in close contact with Dirac (Pauli 1933) for one week. Dirac was an inspirational physicist. During 1967-86, Dr. Kim published six papers with Wigner (Nobel 1962) on this subject. Dr. Kim met Wigner (Nobel 1962) when he was a graduate student and post-doc at Princeton University (1958-62).