

STANLEY G. WOJCICKI

Stanford University

Stanley Wojcicki was born in Warsaw, Poland, in 1937. He received his AB degree in 1957 from Harvard and a PhD in experimental high energy physics from UC Berkeley in 1962. After one and a half years of postdoctoral work at Berkeley he spent a year and a half in Europe, nine months at CERN, Geneva, Switzerland, and then nine months at the College de France in Paris, France. After his stay in Europe he returned to Berkeley for one year, and in 1966 moved to Stanford where he assumed the position of an assistant professor of physics. Two years later he was promoted to an associate professor; in 1974 he became a professor of physics at Stanford. From 1982 until 1985 Dr. Wojcicki served as chairman of the Physics Department at Stanford.

Wojcicki's research is in the field of experimental particle physics. His PhD thesis and initial postdoctoral research has concerned itself with the strange particle resonances and its interpretations in the framework of the quark model. More recently his work covered a wider spectrum of interests, covering such diverse topics as CP violation, weak decays, muon $g-2$ experiment, production and decay of heavy quark states, e^+e^- annihilations and neutrino oscillations. Recently he finished an experimental program designed to search for rare K decays at Brookhaven National Laboratory and switched his efforts to studies of neutrino oscillations at Fermilab. On two different occasions, in 1973-74 and 1980-81, Wojcicki spent his sabbatical year in Europe, both times working at CERN in Geneva, Switzerland. He has performed research at Lawrence Berkeley Laboratory, Fermilab, Stanford Linear Accelerator Center (SLAC), Brookhaven and CERN.

During his teaching career at Stanford, Wojcicki has taught mainly elementary physics courses, both for premedical students and engineering majors. In 1979 he was honored with the Dean's Award for Distinguished Teaching. He has served on numerous University and Departmental committees and was a member of Visiting Committees for Lawrence Berkeley Laboratory, Laboratory of Nuclear Science at MIT, Physics Department at UC Santa Cruz, Fermilab National Laboratory, College of William and Mary, and Harvard University. He has also served on director's advisory committees for various major physics laboratories, e.g., SLAC, Fermilab, Lawrence Livermore Laboratory and NIKHEF in Amsterdam, Netherlands. During 1994-95 he served as consultant to the Organization for Economic Cooperation and Development on policy issues related to large scale science projects.

Wojcicki has been also involved extensively in various advisory committees to the US Government and in the governance of the American Physical Society. He chaired the High Energy Physics Advisory Panel (HEPAP) Subpanel in 1983 which recommended initiation of the Superconducting Super Collider (SSC) project and subsequently served for four years as the Deputy Director of the SSC Central Design Group, the organization responsible for initial design of the SSC and the related research. On two separate occasions he served as a member of the Council of the American Physical Society and once on its Executive Board. Most recently, from 1990 until 1996, Wojcicki has served as chairman of HEPAP. During the calendar year 2002, Wojcicki will be chair of the Division of Particles and Fields of the American Physical Society. He is also currently a member of the International Committee for Future Accelerators.

HONORS, ETC.

1. Phi Beta Kappa, 1957.
2. Sigma Xi Society, 1960.
3. National Science Foundation Postdoctoral Fellow, 1964-1965.
4. Alfred P. Sloan Foundation Fellow, 1968-1972.
5. Elected Fellow of the American Physical Society, 1971.
6. John Simon Guggenheim Fellow, 1973-1974.
7. Dean's Distinguished Teaching Award, 1979.
8. Alexander von Humboldt Senior American Scientist, 1980-1981.

COMMENTS REGARDING S. WOJCICKI'S MOST IMPORTANT WORK

1. Observation of the Ξ° particle. This was the first observation of the postulated Ξ° particle. The observation of this particle and its properties provided a crucial test of the Gell-Mann — Nishijima strangeness scheme.
2. Discovery of several strange particle resonant states. These experimental observations (totally unexpected by the theorists) gave the impetus to the very successful SU_3 theory of the strong interactions and the subsequent quark model.
3. Observation and measurement of the charge asymmetry in K_L^0 decay. This was the first (concurrent with Brookhaven work) observation of the charge asymmetry in the decay of any elementary particle and hence a prima facie evidence of CP violation.
4. Measurement of η_\pm parameter. All the early measurements of this important CP violation parameter appear to have been low by about 30%. This experiment provided a clean measurement to settle this controversy.
5. Measurement of form factors in $K\mu_3$ decay. This subject was in a total state of chaos and confusion at the time this measurement was started. Our results turned out to be the definite word on this subject and established the validity of the current algebra.
6. g-2 of the muon. For about twenty years this experiment provided some of the most stringent constraints on new models of elementary particle interactions.

7. τ mass measurement. This measurement was the most accurate determination of the τ mass for over a decade.
8. τ coupling. This experiment established the nature of the τ coupling to be V-A and was consistent with the τ being a sequential lepton.
9. Charm production by hadrons. Simultaneous with the CERN ν beam dump work, this experiment provided the first conclusive evidence for the charm production by hadrons. The cross section values obtained were the most accurate measurement for this process for several years.
10. Charge asymmetry in deep inelastic muon scattering. This experiment provided the first evidence for the validity of the Glashow-Weinberg-Salam model as applied to μ interactions.
11. New limit on the decay $K_L^0 \rightarrow \mu e$. This is the best current limit on this process and excludes several theoretical models proposed earlier.
12. Observation of the decay mode $K_L^0 \rightarrow e^+ e^-$. This is the lowest branching fraction ever observed in particle physics. The value obtained confirmed validity in this area of chiral perturbation theory calculations.

