Longtime physics professor dies at 85

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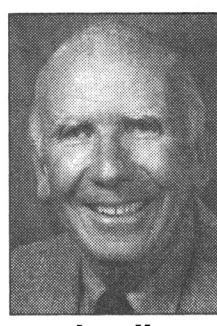
Leon Knopoff, distinguished physical scientist and longtime UCLA faculty member, died of respiratory failure at his home on Jan. 20. He was 85.

As a 60-year veteran of the physics department who pioneered research in the field of seismology, Knopoff was known as an energetic lecturer whose enthusiasm was infectious, said David Jackson, professor of geophysics.



LEON KNOPOFF

"He was very excited about science and just loved discovery," Jackson said. "It was hard for him to stay on the ground when he was teaching, which got students excited too."

Paul Davis, a fellow professor of geophysics, also spoke of Knopoff's charisma as a professor, for which he earned four outstanding teaching awards from UCLA's physics department.

"He was an exceptionally clear and animated lecturer who had a talent for making the subject simple even though it could be quite complex," Davis said.

Davis, whose office was across the hall from Knopoff's, would often hear him interacting with students who came to his office hours. Knopoff would take as much time as they needed to understand complicated concepts and always responded to their questions in an animated way, Davis said.

Knopoff was very student-oriented and treasured the ability to interact with all students, including undergraduates and postdoctoral students, said his wife Joanne Knopoff.

Throughout Knopoff's career at UCLA, 38 of his research students were awarded doctoral degrees. He also worked with 39 postdoctoral scholars from 17 countries.

Knopoff also served as director of the Institute of Geophysics and Planetary Physics at UCLA from 1972 to 1986. In 2001, Knopoff and his wife created an endowment in the College of Letters and Science, which established a chair to support the research of a young scientist in solid Earth geophysics.

"Leon was very devoted to UCLA because it gave him the opportunity to become the scientist he was able to become," Joanne Knopoff said. "He believed the students at UCLA were particularly bright and really loved working with them."

As a researcher, Knopoff was a pioneer in the field of geophysics and mathematical seismology and helped develop the theory of how seismic waves propagate in any kind of physical medium, Jackson said.

He broke ground in the study of earthquakes, earthquake forecasting and plate tectonics, developing mathematical equations to represent a theoretical description of the physical processes that occurred during an earthquake, Davis said.

A prolific writer, Knopoff authored more than 360 academic publications and co-edited five books throughout his career. He was a member of the National Academy of Sciences and the American Academy of Arts and Sciences and was also named the first honorary professor of the Institute of Geophysics of the China Earthquake Administration.

Outside the classroom, Knopoff loved to travel and took advantage of university sabbaticals to travel to England, Germany and Italy with his family. He also harbored an avid passion for classical music and held the position of research musicologist within UCLA's ethnomusicology department.

Knopoff was born in Los Angeles on July 1, 1925. The only child of immigrant parents, he grew up with close ties to the immigrant community in East Los Angeles and graduated from the California Institute of Technology with doctoral degrees in physics and mathematics in 1949. The following year, he began working at UCLA as a research associate in geophysics.

In 1961, he married his wife Joanne upon returning from sabbatical in Cambridge, England.

Knopoff is survived by his wife, Joanne; daughters, Rachel and Katie; son, Michael; and a grandson.

A memorial service will be held on campus at a later date. In place of flowers, the family suggests making a memorial donation to the Leon and Joanne V.C. Knopoff Fund, which funds the Knopoff's endowed chair.