## Michael Cohen, Physics & Astronomy

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Michael Cohen

Michael Cohen, an emeritus professor of physics and astronomy in the School of Arts & Sciences, died on June 30. He was 94.

Born in Manhattan, New York, Dr. Cohen attended Horace Mann School and then Cornell University, where he was a member of Telluride House and the team that won the 1951 William Lowell Putnam Mathematical Competition. After graduating Phi Beta Kappa with a BS in physics in 1951, he enrolled in the graduate program in physics at the California Institute of Technology. At CalTech, Dr. Cohen researched the behavior of liquid helium under famous physicist Richard Feynman. Dr. Feynman was notoriously picky about graduate students, and Dr. Cohen was one of only 30 trainees Dr. Feynman took on throughout his career. In an interview with the American Institute of Physics, Dr. Feynman remembered how he'd given up

on a particular set of calculations because he'd decided they were "too hard." However, he recalled that Dr. Cohen "found they weren't as hard as I thought" and cracked them.

Dr. Cohen earned his PhD in 1956 from CalTech, then stayed on to complete a postdoctoral fellowship with Dr. Feynman. On the strength of his mentor's recommendation, Dr. Cohen then did a second postdoc at the Institute for Advanced Study in Princeton with J. Robert Oppenheimer, father of the atomic bomb. Then, heeding the counsel of "Oppie," he came to Penn in 1958 as an assistant professor of physics. He became an associate professor two years later and a full professor in 1973.

Dr. Cohen spent the rest of his career at Penn. A condensed matter physicist, he studied the quantum mechanics of liquid helium, as well as ferroelectrics and phospholipid membranes. He enjoyed leading a problem-solving seminar for graduate students preparing for the PhD qualifying exam; for this work, he jokingly described himself as "the department's Stanley Kaplan." He also reveled in campus politics, serving as a longtime member of Penn's faculty senate.

In 1962, with George Stranahan and Robert Craig, Dr. Cohen co-founded the Aspen Center for Physics in Aspen, Colorado. According to The New York Times, the center has "proved pivotal in the development of the Fermi National Accelerator Laboratory, for a long time the world's most powerful particle accelerator, and the formulation of string theory, regarded by many physicists as the most promising candidate for a 'theory of everything' that would explain all the universe's physical phenomena." When the center became an independent nonprofit in 1968, Dr. Cohen was elected its first treasurer. He followed this with a term as the center's vice president, and then, for another 48 years, as an honorary trustee.

In retirement, Dr. Cohen wrote an introductory textbook in classical mechanics, which is available for free here (https://www.physics.upenn.edu/sites/default/files/Classical\_Mechanics\_a\_Critical\_Introduction\_0\_0.pdf).

Dr. Cohen is survived by his sister, Vera Gottlieb; his three children, Adam (C'90) (Mary), Jonathan, and Alison (Nurit Bloom); his seven grandchildren, Will, Theo, Leah, Aiden, Naomi, Vivi, and Daph; and his caregiver, Jeanette Edwards.

Donations in Dr. Cohen's memory may be made to the Aspen Center for Physics (https://aspenphys.org/). If you choose to give, you can notify Dr. Cohen's family of the donation by clicking the email notification box and entering cohena@omrf.org (mailto:cohena@omrf.org).