

School of Mathematical Sciences The Raymond and Beverly Sackler Faculty of Exact Sciences Tel Aviv University

בית הספר למדעי המתמטיקה הפקולטה למדעים מדויקים ע״ש ריימונד ובברלי סאקלר אוניברסיטת תל אביב



Saul Abarbanel was born on June 1st 1931 in Montclair, New Jersey, USA and died in Tel Aviv on December 22nd, 2017. Saul's family moved to Israel when he was a young boy, and he grew up in Tel-Aviv and served in the IDF in 1948-1950, including during the War of Independence (1948-1949). After that he went back to the United States for his university studies and received all three degrees (B.Sc., M.Sc. and Ph.D.) from MIT. The first two were in Aeronautics and Astronautics and the doctoral dissertation in Theoretical Aerodynamics in 1959. For his post-doctoral work Saul returned to Israel, to the department of Applied Mathematics at the Weizmann Institute of Science (1960-1961), and was then appointed Assistant Professor at MIT (1961-1964). In 1964 Abarbanel was appointed Associate Professor at

Tel-Aviv University and served as the Head of the Department of Applied Mathematics until 1970. In 1970 he was promoted to Professor and he retired as Professor Emeritus in 1999. Abarbanel served as Dean of the Faculty of Natural Science in 1966-1971, and after his tenure the Faculty split into two faculties, Exact Sciences and Life Sciences. In 1972 he became Vice Rector and in 1977 Rector of Tel-Aviv University. He served as Chairman of the National Research Council of Israel (1986-1993), and was the Director of the Sackler Institute of Advanced Studies at Tel Aviv University from 1997 to 2003.

The early work of Abarbanel on Computational Fluid Dynamics (CFD), heat transfer and combustion, led him to realization of the importance of theory in achieving practical results. Subsequently, he studied questions of stability, convergence and imposing proper boundary treatments on discretizations of time-dependent problems, with applications to hydrodynamics and electromagnetics.

Abarbanel supervised nine Ph.D. students, most prominent among them, Eitan Tadmor and the late David Gottlieb. He was consultant to NASA and was a frequent Visiting Professor at MIT, Brown and the University of California, Berkeley. In 1992 he was awarded the Scientific Achievement Award by NASA.