

SHLOMO HOROWITZ
1938–1978

Shlomo Horowitz was born in Russia in 1938. In 1949 he immigrated with his family to Israel and studied in a Chabad Yeshiva until he was 21. Shlomo then enlisted in the army, where his education was listed as elementary school (not completed). After the army Shlomo obtained his High School diploma.

Shlomo started his academic studies in 1963 at the Hebrew University of Jerusalem. In 1966 he obtained his B.Sc. degree, a year later his M.Sc., and in 1969 the Ph.D. degree. His dissertation is entitled *Invariant measures and limit theorems for Markov processes*.

After obtaining the Ph.D. degree Shlomo visited at the University of Minnesota for one year, and another year at SUNY in Albany, New York. Since 1971 until his sudden death, in May 1978, he was a member of the faculty of Tel Aviv University.

I met Shlomo in 1966 and I was his Ph.D. advisor. Most of his thesis was written while I was away on a sabbatical. I do not remember Shlomo ever making a mistake, even during the first steps in his thesis. He was extremely original and each of his papers contains a surprise in its results or in its method of proof.

Shlomo was shy and delicate, but he was strong willed. As a colleague he was friendly and kind. Being a deeply religious man he did not participate much in the social life at the university.

Let me conclude this short tribute to his memory with a description of the main features of his mathematical work:

(1) The existence of a σ finite invariant measure for a Markov operator (see [2] and [6]).

(2) A Harris operator is a conservative and ergodic operator that dominates a non-trivial integral kernel. Shlomo studied the asymptotical behavior of the iterates of a Harris operator. Thus he proved pointwise convergence of the iterates (see [1], [3], [4], [10] and [12]). By applying the theory of quasi-compact operators Shlomo gave an analytic proof of the Ornstein–Metivier–Brunel Theorem.

(3) The theory of Markov operators on a locally compact topological space, in particular, the definition of conservative operators and their properties. Also, ratio limit theorems and the existence of a σ finite invariant measure are studied in [5].

(4) Extension of the above results to semi-groups of Markov operators (see [7] and [9]).

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