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VLADIMIR FEDOROVICH LAZUTKIN

Professor at the department of mathematics and mathematical physics, Faculty of Physics, St.Petersburg State University; born in Leningrad on 13 October 1941.

At this time his father, Feodor Ivanovich Lazutkin, was at front-lines of the Second World War. A few months after his birth the baby and his mother, Maria Semenovna Lazutkina, were evacuated from Leningrad. They lived in the Penza region until the end of the war. After the war the family came back to Leningrad. In 1946 his sister Elena was born. The father returned to his civil profession of geologist. In 1954 the father, as a soviet specialist, was sent to China. The whole family traveled with him. They stayed there till 1958. In 1959 V. F. Lazutkin graduated from the school No. 82 in Leningrad, and entered the Physics faculty of the Leningrad State University. He graduated from the university in 1964, became a postgraduate student and got his Candidate of Sciences degree in mathematical physics in 1967. After that he has been working at the Faculty of Physics, first as an assistant professor and, since 1970, as a senior researcher. In 1977 he defended the Doctor of Science thesis. From 1987 to 1991 he was a head of the department of applied mathematics at the Leningrad Institute of Aviation Instrumentation; in 1991 he was a co-coordinator of a semester at the Euler Mathematical Institute in Leningrad. In 1992 he returned to the Faculty of Physics as a professor.

Scientific interests of V. F. Lazutkin were formed under the strong influence of his scientific advisor professor V. M. Babich, a head of the Leningrad scientific school for diffraction and wave propagation. At the beginning of his research activity V. F. Lazutkin studied asymptotic theory of discrete spectrum for elliptic boundary problems and obtained some important results, which were recognized both in Russia and abroad. These resulted in two monographs: "Convex billiards and eigenfunctions of Laplace operator" published by LGU in 1981 and "KAM theory and semiclassical approximation to eigenfunctions" published by Springer in 1993. Starting from the early 1980th Lazutkin's research interests shifted towards classical dynamic systems. He and his students were developing asymptotic theory for exponentially small splitting of separatrices in Hamiltonian systems. The main achievement was the derivation and the proof of an asymptotic formula for the splitting of separatrices for the standard map.

In 1984 he derived an asymptotic formula containing the leading term for the angle of intersection of separatrices [48]. The English translation of this paper made by V. Gelfreich is included in this book.

The asymptotic formula which included the complete asymptotic series for the splitting was derived by V. F. Lazutkin in collaboration with N. V. Svanidze and V. G. Gelfreich – his former students [79]. The final proof was published by V. G. Gelfreich in 1999.

V. F. Lazutkin loved classical music and nature. He was married to T. F. Pankratova, an associate professor at the mathematical department of PITMO, they have a daughter Maria, she is a student. The eldest Lazutkin's daughter Olga from the first marriage with V. F. Lazutkina (Zavgorodneva) is married and has a daughter.

V. F. Lazutkin wrote 96 scientific works, including two above-mentioned monographs. He was a scientific advisor for 4 candidate of sciences theses.

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