

Analysis

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Alexander Peyerimhoff

On August 13, 1996 Alexander Peyerimhoff died in Ulm after a short illness. He was the founder of the journal *Analysis* in 1981, and was active as Editor-in-Chief until his sudden death.

A. Peyerimhoff was born 1926 in Göppingen, grew up in Rottweil and Heidenheim in southern Germany. After a short military service he became prisoner of war until the end of 1945. Afterwards in 1946 he started to study mathematics in Tübingen, where he received his Ph.D. in 1951 and only one year later the „*venia legendi*“. Under the supervision of Konrad Knopp he wrote his Ph.D. thesis „*Konvergenz- und Summierbarkeitsfaktoren*“. For the time being summability was his main field of research, and very soon he belonged to the leading international summabilists. His Springer „*Lecture Notes on Summability*“, which appeared 1969, is known until now by everyone working in this field. From 1952 until 1959 A. Peyerimhoff had a position as assistant professor in Giessen, interrupted only by several longer stays in the United States (Cincinnati and University of Utah, Salt Lake City). During that period he devoted himself to the theory of Fourier series (under the key word „*Riemann localization theorem*“). In 1959 he became full professor at the University of Marburg. His interests then shifted to complex analysis (in particular, the distribution of zeros of special functions). At the same time he continued doing research in summability and also on Laplace integrals. Many of his papers of that period were published jointly with his longtime friends and colleagues W.B. Jurkat and H.-E. Richert. In 1969 A. Peyerimhoff obtained the first chair in mathematics at the newly founded University of Ulm. He held this position until his retirement in 1994. In this new position he continued working on the distribution of zeros, and in the early 1970's he became interested in the Mertens conjecture (in number theory!), which has been solved in the meantime. The papers on that subject were mainly based on the numerical computation of the zeros of the Riemann zeta function. These computations were the reason for his interest in high accuracy arithmetic. Since the computers existing at that time were not suitable for these purposes, he started to build computers by himself, which he continued until his death. When writing a textbook on ordinary differential equations, A. Peyerimhoff became interested in eigenvalue problems and oscillation of solutions of corresponding equations, which lead to several publications in this field. In addition, a research project on hydrodynamics lead to papers in the field of partial differential equations (in particular concerning theory and numerics of the Stokes system).

Alexander Peyerimhoff was an analyst with international reputation, who had worked in almost all areas of analysis. He was a very engaged and inspiring academic teacher, who was well liked by his students as well as his colleagues. This also originated in the always friendly atmosphere surrounding him. His list of thirtytwo Ph.D. students is impressive. Besides his work as researcher and teacher A. Peyerimhoff supported the development of the University of Ulm. He served as vicepresident as well as chairman of the senate, and he promoted the university substantially in supporting the introduction of the new curriculae „*Wirtschaftsmathematik*“ (a combination of mathematics and economics) in 1977 and „*Computer Science*“ in 1989 at the University of Ulm.

We mourn for Alexander Peyerimhoff.

