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A Tribute to G. G. Lorentz

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Professor Lorentz was born in Leningrad, U.S.S.R., on February 25, 1910, and studied first at the Polytechnic Institute at Tiflis and then at the University of Leningrad until 1931. He served as an Assistant and a Docent at this same University. Later he became a Research Assistant at Tübingen, a Docent at Frankfurt, and an Apl. Professor at Tübingen.

He has many times related his fond memories of Tübingen and in particular, of the many kindnesses of his students, helping him pack and seeing him off at the time of his departure.

I have also heard that his advent marked a new era at Tübingen and his early work there in Functional Analysis indicated new directions for research. Certainly his work in Functional Analysis added new interests to Mathematics in Canada after his arrival at the University of Toronto. He went there as a Lecturer in 1949, rising to the rank of Assistant Professor. In 1953, instead of accepting an Associate Professorship at Toronto, he went as Full Professor to Wayne State University. In 1958 he accepted a Professorship at Syracuse University. Since 1967 he has been at the University of Texas at Austin.

Those of us who were at the University of Toronto in 1949 remember the perfection of his lectures, both graduate and undergraduate. They were delivered with a command of English which made it difficult to believe he had not had much previous experience lecturing in this language. The organization of the material was very good and the content presented a titillating mixture of well-known theorems and personal research. Sometimes the material would be so new that it could not be found elsewhere. As a supervisor of graduate work he displayed an unending zeal and interest in his students' work. At one time, I remember, there were five of us coming to him separately each week for an hour. We were always greeted with a smile and treated to an intelligent and pertinent discussion of our work. When we bogged down, he took a hand himself; when we succeeded, he praised us. He has always given of his knowledge freely and been very stimulating to students, even those in lines different from his own.

Over the years we have come to know him as a kind and lavish host. He would be the first to admit his debt in all things to his gracious wife and lively children. His is a home of many interests, some of them epicurean.

So many outside interests attract him personally that we can only indicate them--travel, mountains, fine books, photography, languages and not least of all, chess. I suspect that conversation could be, too, one of his main interests. I can still remember some mathematical demonstrations concerning give-away chess, and tales of being 25th board of the Chess Club at Leningrad University. From other sources I have heard of serious matches with Professor L. C. Young. Lorentz's latest exploit was a trip to Iceland for the Fischer–Spassky match. There have also been stories of meteorological investigations in the wilds of the Caucusus, most likely a thin excuse for mountain climbing.

His main interests have been Approximation Theory, Functional Analysis and Summability. There has also been a continuing interest in Additive Number Theory and occasional papers on different topics such as Rearrangements, Inequalities and Measure Theory, to name a few. For example, the result in [20][1] is very tantalizing. I have studied it many times and admired the conception and economy of effort. It is difficult to improve or extend the result, however easy it looks. Rearrangements are studied in [32], the particular problem at hand being dealt with completely. There are many other single papers treating some special problem completely and elegantly. The long and continuing interest in Functional Analysis is reflected in many papers. The special Lorentz spaces, $\Lambda(\alpha)$, $M(\alpha)$ and their developments first announced in [24] have been much used and quoted. The inequality in [24] connecting $\Lambda(\alpha)$ and $M(\alpha)$ is itself a little gem. There are at least twenty papers on summability with many outstanding results, [17] and [42] among them. The majority of his papers since 1964 and all his books have been on Approximation Theory. His monograph "Approximation of Functions" reflects a particularly good choice from the wide area of the subject and gives a masterful development.

The list of publications extends to eighty-five articles and five books. Five languages have been used, and—significant as a measure of his stimulating mind and agreeable personality—there have been thirteen co-authors of papers.

Professor Lorentz's scholarship is today at its full efflorescence and his new ideas appear regularly and undiminished in importance. We, his friends and students, salute him with the hope and expectation that he long continues to flourish.

[1] See the list of Lorentz's publications.