

DOCUMENTS OF THE GENERAL FACULTY

**REPORT OF THE MEMORIAL RESOLUTION COMMITTEE FOR
GEORGE G. LORENTZ**

The special committee of the General Faculty to prepare a memorial resolution for George G. Lorentz, professor emeritus, mathematics, has filed with the secretary of the General Faculty the following report.

Sue Alexander Greninger, Secretary
The General Faculty

**IN MEMORIAM
GEORGE G. LORENTZ**

George G. Lorentz, professor emeritus of mathematics, died on January 1, 2006. He was 95 years old.

Professor Lorentz joined the faculty of The University of Texas at Austin in 1968, coming from a professorship at Syracuse University. He was a participant in a vigorous program initiated by John Silber (dean of arts and science) and Leonard Gillman (chairman of the mathematics department) aimed at rebuilding the department after years of decline.

Professor Lorentz had an eventful early history. He was born in St. Petersburg, Russia, on February 25, 1910. The rumblings of political discontent were already affecting the Lorentz family. Four years before George's birth, his father, an administrator with the national railway, refused to participate in repressing a workers' strike and was barred from further employment by the national railway system. However, he could still work for private railways, mostly situated in the south.

After several moves and five years in Armavir, near the Black Sea (45.00N, 41.08E), the family settled in Tiflis, the capital of Georgia (44.49E, 41.43N). [Longitude and latitude are provided for the benefit of readers wishing to trace the peregrinations of the family.] George attended first a Russian secondary school and later a German one, thereby becoming fluent in German. In 1926, he entered the Tiflis Institute of Technology, and in 1928, he transferred to the School of Mathematics and Mechanics in Leningrad University. He received his diploma there in 1931. Then the civil war following the revolution began to take its toll. The authorities seemed to be antagonistic towards mathematics, it being deemed too theoretical. The mathematical societies in St. Petersburg and Moscow were disbanded. George nevertheless became a docent at the University of Leningrad in 1936. In 1937, George's father was arrested on false charges and sent to a concentration camp, where he died in 1938. This profound tragedy interrupted George's studies for about five years. A mathematical textbook (on functional analysis) that he had nearly finished writing was never completed.

Now, for political reasons, it seemed to George that his doctorate could not be obtained in the New Russia. In addition to this worry, the war between Russia and Germany began in June of 1941. The winter of 1941-42 was especially severe in St. Petersburg, as the city was under siege and continual artillery fire from the enemy. George and his newly wedded wife, Tanny, survived under semi-starvation conditions. As soon as he could, George investigated various avenues of escape, and finally the family was able to join a group from a pedagogical institute that had received permission to retreat to Kislovodsk (43.55N, 42.44E).

When the German army began its advance eastward in the spring of 1942, it quickly captured Kislovodsk, and the Lorentz family became stateless, although officially registered as ethnic Germans. After a long and arduous journey, they arrived at a refugee camp at Torun in Poland (53.02N, 18.35E).

In 1943, writing from Torun, George managed to submit two mathematical papers to Professor Knopp in Tübingen, for possible publication in the journal, *Mathematische Zeitschrift*. With the help of Professor Süss, Knopp was able to arrange the relocation of the Lorentz family to Tübingen (48.31N, 9.02E). The family consisted of George, his wife Tanny, and their new-born son, Rudolph. George obtained the doctoral degree in Tübingen and later (during the French occupation) the Habilitation. When the war ended, Germany was divided into French, American, and British zones, and Tübingen was in the French zone. Unfortunately, now a new obstacle arose: the French regarded the Lorentz family as undesirable foreigners who should be sent back to

Russia! Because of this serious threat, George approached authorities in the American zone of the occupied Germany in 1946. They then issued a document classifying the Lorentz family as officially "stateless." Thirteen years later, in 1959, the family officially became American.

George served as docent in Tübingen and Frankfurt. During this time, he began to be much more productive. He wrote some twenty mathematical papers in Tübingen, several with the famous mathematicians, Kamke and Knopp. He had two doctoral students, W. B. Jurkat and K. L. Zeller, both of whom established excellent careers of their own.

After the period of association with the University at Tübingen, George was fortunate to be offered a fellowship at the University of Toronto, under the aegis of the Lady Davis Foundation. He and his family, which had grown due to the birth of his four daughters (Erica, Irene, Olga and Kathy), emigrated to Canada in 1949. In Toronto, although appointed as an instructor, he had the honor of serving as supervisor of all the Ph.D. candidates. There were several such individuals, including G.M. Petersen and P.L. Butzer, who became strong mathematicians themselves. George collaborated with several faculty members of the Toronto mathematics department. Among these were Abraham Robinson, M.S. Macphail, and P. Sherk.

In 1953, George was offered a professorship at Wayne State University, with a most welcome doubling of his salary. In 1958, he was offered professorships at Toronto and Syracuse, and chose Syracuse, where he remained happily until 1968. The University of Texas lured him away from Syracuse in that year, and he became one of the leading members of our mathematics department. His research continued unabated, often with co-workers and Ph.D. students. He wrote approximately 130 papers and five books, with a long list of collaborators. Among the latter, is George's son, Rudolph, who is at the Institute for Algorithms and Scientific Computing of the Fraunhofer Gesellschaft in Germany and is also professor at the University of Duisburg.

In 1973, George initiated a series of meetings in Austin on the subject of "Approximation Theory." These convened every three years, either in Austin or College Station, and they became the principal regular symposia in this branch of mathematics. These meetings have now continued for thirty-three years. One of the high points of these meetings were the parties held at his home for the conference participants. The hostess to these and to countless other parties was his wife Tanny, who went to extraordinary efforts to serve her guests typical Russian food.

In 1977, George received an honorary doctorate from the University of Tübingen when it celebrated its 500 Year Jubilee. The citation accompanying the award emphasized Lorentz's fundamental investigations in summability, approximation, and functional analysis. It noted his generous support of the younger generation of scientists, and his services rendered for international cooperation in mathematics. In 1996, he received a second honorary degree from the University of Würzburg.

Although he retired in 1980 at 70, he remained active mathematically for another fifteen years. Both volumes of "Constructive Approximation" as well as other papers were written during this time. He liked to write about the history and the politics of mathematics. The paper "Who discovered analytic sets" appeared in 2001 in the *Mathematical Intelligencer*. "Mathematics and politics in the Soviet Union from 1928 to 1953," a fifty-five page paper, appeared in 2002 in the *Journal of Approximation Theory*.

These publications were always thoroughly researched. During his numerous visits to Germany, he made it a point to visit the main libraries (Oberwolfach, Berlin, Dresden) to collect material for his research. And he accomplished all this at the age of 90!

His main hobbies were chess and stamp collecting. He played chess competitively as a student in Russia, but later he followed it as a spectator, both "live" and by analyzing famous historical chess matches. He was in Iceland in 1972 to watch Fisher beat Spassky. Fisher became the first and only American world chess champion.

Stamp collecting was more for relaxation, perhaps something like fishing, only at home. But even then, he could not help being "productive" in that he displayed his stamps at stamp exhibitions. However, he was not so successful there as at mathematics.

George's last years were spent in Chico, California, where his wife Tanny died at the age of 91. At the time of his death, George was survived by all of his children, eight grandchildren, and two great-grandchildren.

This memorial resolution was prepared by a special committee consisting of Professors Ward Cheney (chair), Klaus Bichteler, and James Daniel.

Distributed to the dean of the College of Natural Sciences, the executive vice president and provost, and the president on October 4, 2006. Copies are available on request from the Office of the General Faculty, WMB 2.102, F9500. This resolution is posted under "Memorials" at: <http://www.utexas.edu/faculty/council/>.