

## LAJOS TAMÁSSY – TOUCHES ON A PORTRAIT

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This special issue is intended as a small token of appreciation for our mentor, Lajos Tamássy, on the occasion of his 90th birthday. It contains a collection of 14 refereed articles which come from the joint events of Colloquium on Differential Geometry and IXth International Conference on Finsler Extensions of Relativity Theory held in Debrecen, Hungary, 26–30 August 2013.

On a couple of pages would it simply be hopeless to give a complete description of Lajos Tamássy's exemplary course of life, of his scientific career, and the plenty of his deep and ingenious results in the area of differential geometry. In fact, the lack of space causes only the smaller part of difficulties. A comprehensive overview would require the proficiency of a historian and a profound familiarity with a broad spectrum of geometry, but these qualities can rarely be found in a single person. Thus, in the following, I will attempt to concentrate only on a few important facts, and outline the background, circumstances and challenges among which his career developed.

Lajos Tamássy was born on 17th April 1923 in Debrecen. He attended primary school in his native town, and secondary school in Pécs, in the southwestern part of Hungary. He started his studies of mathematics, physics and descriptive geometry at the University of Debrecen in 1946. However, before entering the building of science (both in a direct and in a figurative sense), he had had some very hard years: military service, also on the battlefield, he was injured and became a prisoner of war. Thus, it was not easy to follow the path predestined for him. This was rather typical for his generation, shared, for example, by Makoto Matsumoto, who was only two years older than he, and with whom they later became good friends.

While still a student, he became a demonstrator and took part in teaching work. After his graduation he taught for a short time in a Debrecen secondary school, and then went to Szeged University for two years. (Szeged is a town by the river Tisza, near the Serbian border. From 1929 to 1946, the leading professor of the Bolyai Institute here was Frigyes Riesz, moreover, Alfréd Haar also worked here until his early death in 1933.)

After such antecedents, in January 1953, Lajos Tamássy was appointed assistant professor at the Department of Mathematics of what was then Kossuth University, the predecessor of the University of Debrecen. Thus the year of 2013 has brought yet another anniversary—Professor Tamássy has completed sixty years of uninterrupted service at this University.

In 1953 the Department of Mathematics at Debrecen University had only a few staff members, but it was headed by Ottó Varga, whom we need not present to workers in the field of Finsler geometry. It was he who founded the Debrecen school of Finsler geometry. Let us make a detour here.

At the German University of Prague Ottó Varga was a student and later a colleague of Ludwig Berwald, the virtual founder and most eminent personality of Finsler geometry. After the German occupation of Prague and the deportation of Berwald and his wife to the ghetto in Łódź, Ottó Varga started to feel compelled to leave Prague. After a small detour, in January 1942 he got a job at the University of Debrecen. His first co-worker was András RAPCSÁK, whose name is also well-known within the Finslerian community. Before long, there came Arthur Moór, Lajos Tamássy and Gyula Soós. (Arthur Moór was born also in 1923.) They form the great generation of differential geometers in Debrecen.

In 1957 Ottó Varga and Gyula Soós went to Budapest. Arthur Moór, who died in 1985, did the greater part of his work in Sopron, a city in western Hungary. At the head of what had become by that time the Department of Geometry, Ottó Varga was succeeded by András Rapcsák and he held this position until 1973.

Forty years ago, in 1973, Lajos Tamássy was appointed Head of the Department of Geometry. Right from the start, he was faced with a double challenge. On the one hand, following in the footsteps of his predecessors, Ottó Varga and András Rapcsák, he had to preserve the internationally acknowledged position of the Debrecen school of differential geometry. On the other hand, he had to satisfy the requirements posed by a rapid and accelerating development, i.e., the requirement of modernization. Indeed, it must be pointed out that beginning with the fifties, truly dramatic changes have taken place within differential geometry. A new conceptual and technical apparatus emerged, continually extending its scope, and winning more and more followers. Traditional tensor calculus lost its dominant position and found itself driven to the periphery. Sensitive to change, theoretical physicists too began to use the new language. Classical mechanics was given firm geometric foundations in the new spirit, and the physical applications of the methods of differential geometry came to constitute an independent discipline. Under these circumstances, sticking exclusively to the old methods would not have been rewarding.

Fifty-year-old Lajos Tamássy was quick in mastering the new ideas, which he then transmitted to his disciples, thus laying the foundations of durable development, the fruits of which have matured under his careful guidance. Lajos

Tamássy led the Department from 1973 to 1988. During these fifteen years, fifteen dissertations were written under his supervision. He also succeeded in significantly furthering the international connections of the Department. Particular mention is due to the very fruitful relationship with Japanese colleagues since 1975, his visit to Japan. It was after this that Professor Makoto Matsumoto of Kyoto University, a leading personality in Finsler geometry, spent a semester in Debrecen as a Visiting Professor. Fruitful cooperation with his group is still alive. Acknowledging the scientific achievement of Professor Matsumoto and his fostering cooperation, he was conferred an honorary degree in Debrecen in 1990.

Earlier, research in differential geometry in Debrecen was characterized by certain—but never complete—homogeneity in method and scope. By now, in the second decade of the 21st century, the scientific spectrum of the Department of Geometry has become much richer and more diversified. The pupils of Professor Tamássy have reached mathematical maturity, and the disciples of the disciples have also shown their prowess. While the traditional ‘Debrecen themes’ are still being studied, quite a few new topics have been taken up. Professor Tamássy, who continues his scientific activity unabated, has played a leading role in this process of ‘opening and enlarging’. I mention a few facts to illustrate this scientific activity. In the last two decades he has doubled the number of his publications, which was considerable even before. He has visited four continents as an invited lecturer of prestigious conferences. He has been editing *Publicationes Mathematicae* for more than twenty years, and the prestige of the journal has considerably increased due to his work.

All of the authors of this volume wish him to remain strong, agile and active. All of his friends, acolytes and colleagues hope that—guided by his exceptionally fine and reliable intuition of geometry—he will continue the exploration of the new non-Euclidean worlds, whose doors were opened by the great discoverers, Bolyai and Lobachevsky.

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