

## IN MEMORIAM

### PROFESSOR DR. GHEORGHE ATANASIU 1939-2014



Professor Gheorghe Atanasiu was born on August 23, 1939, in Bacău-Romania.

He attended the Faculty of Mathematics and Physics of "Al. I. Cuza" University of Iași, that he graduated from 1961, being subsequently hired as a teaching assistant at the Polytechnic Institute of Brașov.

A rich academic career followed, with outstanding achievements in the formation of a geometry school in Brașov. Since 1971, Prof. G. Atanasiu has made a major contribution to the prestige of the young Faculty of Mathematics at the University of Brașov.

In 1974, he was appointed chair of the Department of Geometry at the University of Brașov, a position which he held, with some interruptions, until 2007. In 2008 he retired, but continued to have a close connection with the Faculty of Mathematics and Computer Science of Brasov University.

Prof. G. Atanasiu contributed to the formation of dozens of generations of mathematicians and engineers and he is remembered by his former students for the clarity and the depth of his lectures.

He obtained a Ph.D. degree at the University Al. I. Cuza University of Iași, with the thesis "Pairs of connections compatible with G-structures", under the supervision of Prof. Dr. Gheorghe Georgiev.

In 1980, he was awarded the Gheorghe Țițeica Award by the Romanian Academy.

He published numerous scientific articles, 122 of which are registered by Mathematical Reviews and wrote dozens of textbooks.

Prof. Atanasiu's works cover various areas of differential geometry, especially Finsler geometry and its applications. In the 80's, he extended the study (initiated in his Ph.D. thesis) of geometric structures to the tangent bundle equipped with a linear connection. He explored the existence of Finsler connections compatible with these structures and made important contributions to the study of Lagrange geometry. In 1986, Professor Radu Miron initiated the study the Hamilton geometry. A close associate of Prof. R. Miron in this field was Professor G. Atanasiu.

In the early 90's, he tackled, along with G. Munteanu, the geometry of the second order tangent bundle . Later on, together with R. Miron he got remarkable results on this topic, which is nowadays known under the name of geometry of the  $k$ -osculating bundle. The main issues considered in this area are related to prolongations of Riemannian metrics, Finslerian or Lagrangian structures to  $Osc^k M$  and to the study of some higher order Lagrangians with applications in theoretical physics.

In recent years Professor G. Atanasiu studied together with his collaborators the issue Berwald-Moor metrics and their extensions to the bundle  $Osc^2 M$ , followed by various applications in theoretical physics; this was the subject of a long term and fruitful collaboration of the whole Braşov team led by him with the Research Institute for Hypercomplex Systems in Geometry and Physics in Fryazino-Russia. Also, over the last few years, he studied, together with M. Neagu, issues related to multi-time Lagrange and Hamilton geometry.

Prof. G. Atanasiu collaborated with numerous scientists from Romania and abroad.

Professor G. Atanasiu was the doctoral advisor of several geometers from the Faculty of Mathematics and Computer Science of Braşov and from other Romanian universities.

A special contribution belongs to Professor G. Atanasiu in organizing in Braşov, in collaboration with Academician Prof. Doc. Radu Miron, the biennial National Seminars in Finsler and Lagrange Spaces, from 1980 until 1994. These Seminars were the environment in which many of the ideas in Finsler geometry in the 80's and 90's appeared and developed; it was a great geometry school, whose results are still visible now.

He was a member of several scientific associations, such as the Romanian Mathematical Society and a founding member of the Balkan Society of Geometers.

For all these, the Faculty of Mathematics and Computer Science from Braşov pays him a pious homage.

On behalf of the geometers of Braşov,

Ph. D. Gheorghe Munteanu  
Transilvania University of Braşov