# To Academician Professor Radu Miron on the Occasion of his 90th Birthday

Radu Miron, member of the Romanian Academy and Emeritus Professor of the University "Al.I. Cuza" of Iaşi, Romania, celebrated his 90th birthday on October 3, 2017.

He was born in Codaesti, Vaslui county, Romania, in 1927.

In 1948 he enrolled as a student at the Faculty of Mathematics and Physics of the University "Al.I. Cuza" of Iaşi, where he graduated in 1952. In 1953 he enrolled in a Ph. D. program at the Mathematical Institute of the Romanian Academy in Iaşi and, in 1957, obtained his PhD in Mathematics and Physics, defending the thesis *The geometrization of the nonholonomic mechanical systems*", written under the direction of Academician Mendel Haimovici.

In 1973 received the *Doctor Docent* degree. In 1991 he became *Corresponding Member of the Romanian Academy*, and was named a *Full member of the Romanian Academy* in 1993.

At the Faculty of Mathematics and Physics of the University "Al.I. Cuza" of Iaşi, he was appointed *Instructor* in 1950, *Assistant Professor* in 1956, *Associate Professor* in 1963 and *Full Professor* in 1969. He has been Dean of the faculty during the period 1972-1976, and Head of the Department of Geometry in 1976.

His scientific activity began at the Mathematical Seminar "Alexandru Myller" in Iasi, founded by the Academicians Al. Myller and O. Mayer. The almost three hundred publications whose author he is, among them being 35 textbooks, books

and monographs, ilustrate the coordinates of evolution of the scientific and didactic thinking of Professor Radu Miron.

He started his research with the study of the geometrization of the nonholonomic mechanical systems with scleronom links. In his Ph. D. Thesis he solved a problem that has been raised by É. Cartan. In connection with it, then he studied nonholonomic manifolds.

In 1960 Professor Radu Miron studied the so-called Myller configurations. The results were presented in a monograph that received the Gh. Tzitzeica prize of the Romanian Academy. Then he brought significant contributions to the theory of the Weyl , Norden and conformal symplectic spaces. The researche in Finslerian geometry and its generalizations that Professor Radu Miron has introduced in Romania have brought him many satisfactions and successes.

In 1974 he comes to Finsler spaces with an outstanding contribution by building a field of orthonormal frames intrinsically associated to an $n-$dimensional Finsler space. It was called "*the Miron frame*" by Prof. Dr. Makoto Matsumoto from Japan, in his monograph devoted to Finsler spaces.

In 1980 Professor Radu Miron initiates at the University of Brasov The First National Seminar on Finsler Geometry, which was held every two years ever since, and where Prof. Radu Miron presented his main discoveries : generalized Finsler metrics, Lagrange spaces, generalized Lagrange spaces, Hamilton spaces as well as a geometry of the total space of a vector bundle based on the use of a nonlinear connection.

Turning on the applications in Theoretical Physics he developed a Finslerian Theory of Relativity and published at the Romanian Academy in 1987 the monograph Vector bundles. Lagrange spaces. Applications to Relativity, written together with M. Anastasiei.

Since 1988, Professor Radu Miron concentrates much more on applications of the theory of Lagrange spaces and of generalized Lagrange spaces to Theoretical Physics. These applications were included in the book *The Geometry of Lagrange Spaces: Theory and Applications* (R. Miron, M. Anastasiei) published in 1984 by Kluwer Academic Publishers.

He continues with a deep study of the higher order Lagrange spaces that was developed in the monographs *The Geometry of Higher Order Lagrange Spaces. Applications to Mechanics and Physics* (R. Miron, 1997) published by Kluwer Academic Publishers, and *The Geometry of Higher Order Finsler Spaces*, published by Hadronic Press in 1998.

In 2001, the monograph *The geometry of Lagrange and Hamilton spaces* (jointly with D. Hrimiuc, H. Shimada and V.S. Sabau) was published by Kluwer Academic Publishers. In 2007 his book titled *Finsler-Lagrange Geometry. Applications to*

*dynamic systems* (jointly with I. Bucataru) has been published by the Romanian Academy.

Professor Radu Miron received the *Doctor Honoris Causa degree* from universities from Constantza, Craiova, Bacau, Oradea, Galati, Tiraspol. Also, he received diplomas of excellence from: the Romanian Ministry of Education, the University "Al.I. Cuza" Iaşi, The University "P. Andrei" Iaşi.

He is a honorary member of the Academy of Sciences from the Republic of Moldova and Emeritus Professor of the "Al.I. Cuza" University of Iaşi.

In 2003 he received the Opera Omnia award from the Romanian National Council for Scientific Research and the V.Pogor award from City Hall of Iaşi

Professor Radu Miron was invited to lecture by well-known institutions from France, Great Britain, the former Soviet Union, Italy, Germany, Hungary, Yugoslavia, Japan.

A remarkable gifted professor, endowed with the grace of speaking, he has left an indelible mark upon numerous generation of students and collaborators. Being highly concerned with the teaching of geometry at all levels, he wrote books for pupils and students, as well as monographs having a high scientific level meant for researchers.

He supervised 30 Ph. D. students, thirteen of whom were from abroad : Japan, Italy, Hungary, Vietnam.

Although retired in 1997, he continues to work as a Consulting Professor of the Faculty of Mathematics, and as a researcher at the Mathematical Institute "O.Mayer" of the Romanian Academy in Iaşi.

This issue of Libertas Mathematica (new series) is dedicated to Professor Radu Miron in celebration of his 90th birthday, as a recognition of his outstanding contributions to mathematical research and an homage of the Romanian school of mathematics.

Vasile Staicu - Editor-in-Chief