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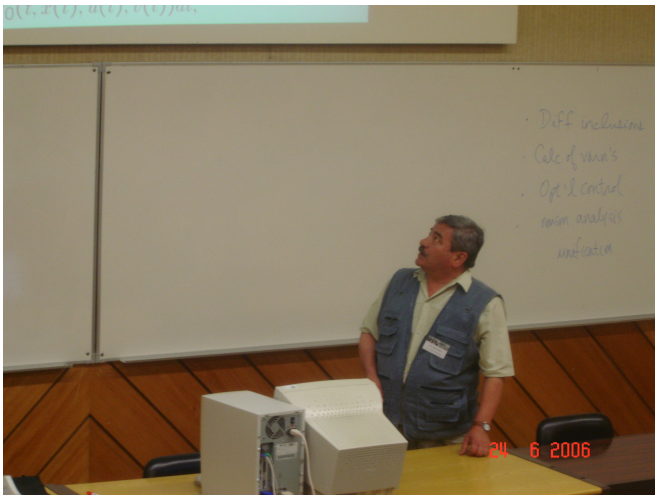

In memoriam: Ştefan Mirică

Aurelian Cernea and Vasile Staicu

Professor Ştefan Mirică was born on September 13, 1942 in Nicoleşti, Buzău county and died ten years ago, on June 4, 2010.

In 1965 he graduated the Faculty of Mathematics, University of Bucharest. Due to the very good results obtained during his university studies in 1965 he was appointed as Assistant Professor at the Faculty of Mathematics, University of Bucharest. Afterwards he became a lecturer (1972), an Associate Professor (1990) and Professor (1992) at this University till 2008.

In 1970 he obtained his Ph. D. degree in mathematics, the doctoral thesis having the title "The problem of synthesis for control systems and differential games on differentiable manifolds" was supervised by Prof. Aristide Halanay.

In 1990 he was awarded the "S. Stoilow" Prize of the Romanian Academy for his monograph "Optimal control. Sufficient conditions and synthesis".

Within the Faculty of Mathematics, University of Bucharest he taught the following courses: Ordinary Differential Equations, Differential and Integral Equations, Calculus of Variations and Optimal Control. Professor Mirică taught Differential Equations for more than 40 years. His monograph on "Differential and Integral Equations" appeared at Bucharest University Press (first edition in 1978, the last

edition in 1999) remains one of the most complete book on this topic in the romanian mathematical literature.

In 1985 Professor Ştefan Mirică started at Faculty of Mathematics of the University of Bucharest a research seminar devoted to differential inclusions, nonsmooth analysis and applications to optimal control theory. The second author of this note, in that time a second year student in Mathematics, had the priviledge to participate to this seminar from its first opening session and remember with pleasure and gratitude the hard but fascinating work done to prepare exposures, from articles published in recent specialized journals, in such a way to be prepared for supporting or combating the results in the weekly sessions of the seminar. In that seminar as well as in the older and well established one guided by Professor Aristide Halanay on Differential Equations and Control theory, several mathematicians interested on Differential Equations have been laid the cornerstones of their future careers.

Professor Ştefan Mirică was Ph. D. advisor within the Faculty of Mathematics, University of Bucharest and he had 6 Ph. D. students.

Professor Ştefan Mirică has accomplished a rich scientific activity. He has published over ninety articles in outstanding journal from abroad and in Romania (SIAM J. Control, Comptes Rendues Acad. Sci. Paris, Nonlinear Analysis, Rend. Sem. Mat. Univ. Padova, J. Optim. Theory Appl., Nonlinear Differ. Eqns. Appl., Optimization, Control and Cybernetics, Revue Roumaine Math. Pures Appl. etc.) and he was the author of 8 books and monographs.

Ştefan Mirică's scientific work has covered extensive fields of Differential Equations and Optimal Control. On the basis of his perfect knowledge of classical analysis, differential geometry and algebra he developed in a systematic manner a collection of concepts and results that could be summarized in theoretical algorithms for solving in the framework of Dynamic Programming optimal control problems. Most of this results are collected in his last monograph "Constructive dynamic programming in optimal control", Romanian Academy Publishing House 2004. Without pretending a deep analysis of Mirică's work we mention also his results in the qualitative theory of differential equations, necessary optimality conditions in optimal control and game theory.

The results obtained by Professor Ştefan Mirică in more than 40 years of activity has been positively reviewed in the reviews journals. The results have been adopted, used and quoted by several renowned mathematicians. The importance of Mirică's achievements has had wide response in numerous invitations to lecture at foreign universities and conferences.

Professor Mirica was a very good teacher, well trained, demanding with his students but friendly and generous to his collaborators. He contributed significantly to the development of the Romanian school of differential equations and control in

the University of Bucharest, acquiring a place of honor among the great professors of this university.

List of publications

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