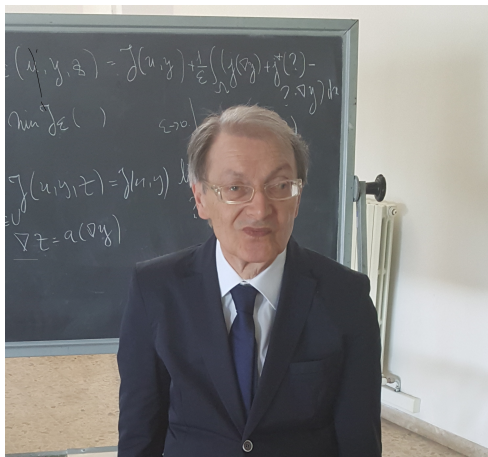# PREFACE TO THIS SPECIAL ISSUE

This special issue of Discrete and Dynamical Systems - Series S is a tribute to Professor Angelo Favini on the occasion of his 70th birthday.

Angelo Favini was born on July 4th, 1946 and he graduated on November 28th, 1969 at the University of Bologna discussing his diploma thesis prepared under the supervision of Professor Bruno Pini, one of the most outstanding Italian mathematicians of the last century.

Angelo Favini started his academic activity in 1971 as Assistant professor at the University of Bologna and on March 1976 he got a position as full professor at the University of Bologna. He had and still have a very intense research activity which spreads out into several fields:

- abstract differential equations in Banach spaces;
- control theory;
- degenerate equations;
- interpolation theory;
- inverse and ill-posed problems;
- partial differential equations.

Throughout the years he collaborated with several mathematicians coming from Algeria, France, Germany, India, Japan, Jordan, Israel, Italy, Romania, Russia, Turkey, Ukraine, United States. This shows how the mathematical community recognizes Angelo Favini as a leading expert in the fields quoted above. In his career he authored (or coauthored) more than 230 scientific papers, the majority of them published on international mathematical journals. His scientific publications have received more that 1200 citations (according to MathSciNet). The first paper, published in 1970, was concerned with interpolation theory in topological vector spaces. After a series of papers on interpolation, Angelo Favini started to analyze (degenerate) abstract differential equations. The first paper on this subject was

published in 1974, followed by more than 60 papers on direct, inverse and control problems for degenerate equations. He coauthored also two scientific monographs on degenerate differential equations:

- A. Favini, A. Yagi: Degenerate differential equations in Banach spaces. Monographs and Textbooks in Pure and Applied Mathematics **215**, Marcel Dekker, Inc., New York, 1999. This book nowadays represents a very well recognized reference for mathematicians working in the field of (abstract) degenerate equations.
- A. Favini, G. Marinoschi: Degenerate nonlinear diffusion equations. Lecture Notes in Mathematics **2049**. Springer, Heidelberg, 2012. This book is devoted to the analysis of nonlinear second-order convection-diffusion equations which are of parabolic-elliptic type and have a singular and possibly multivalued diffusion.

Angelo Favini is member of the Editorial Board of the following international mathematical journals:

- Abstract and Applied Analysis;
- Applicable Analysis;
- Bulletin of the South Ural State University;
- Discrete and Continuous Dynamical Systems. Series S;
- International Journal of Applied and Experimental Mathematics;
- JCAAM;
- Scientiae Mathematicae Japonicae.

and a member of the "*Academia delle Scienze dell'Istituto di Bologna*" a famous Italian institution which, in the past, had Marie Curie and Albert Einstein as members.

Angelo Favini organized also several international conferences in which several leading experts in the field of direct and inverse problems for partial differential equations and in control theory, as well young researchers, had the pleasure to participate.

Bari, Parma, Poitiers,

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