

Preface

The research monograph *Recent Trends in Chaotic, Nonlinear and Complex Dynamics* is dedicated to the 60th anniversary of Professor Miguel A. F. Sanjuán. All chapters are authored by prominent researchers and most of them did give their talks at the special session on the occasion of the celebration of Miguel A. F. Sanjuán's 60th anniversary organized during the *15th International Conference "Dynamical Systems — Theory and Applications" (DSTA 2019)*. The session gathered several dozen scientists to honor Prof. Miguel A. F. Sanjuán by presenting research related to the fields of his scientific interests.

DSTA has an over 25-year-long history. It takes place every two years in Lodz, the third biggest city of Poland and is organized by the Department of Automation, Biomechanics and Mechatronics of the Lodz University of Technology under the patronage of Mechanics Committee of the Polish Academy of Sciences. Its aim is to provide a common platform for exchange of new ideas and results of recent research in the field of scientific and technological advances in modern nonlinear dynamical systems. The latest edition, *DSTA 2019*, that took place in Lodz, Poland from the 2nd to 5th of December of 2019 hosted over 210 participants representing 40 countries from all over the world. It resulted in the program of the conference covering both theoretical and experimental approaches to different topics in nonlinear dynamics, including bifurcations and chaos, control in dynamical systems, asymptotic methods in nonlinear dynamics, stability of dynamical systems, lumped mass and continuous systems vibrations, original numerical methods of

vibration analysis, nonsmooth systems, dynamics in life sciences and bioengineering, engineering systems and differential equations.

The significance and impact of Sanjuán's scientific work is evidenced by the large number of awards and honors he has received during his career. To commemorate Sanjuán's 60th birthday, this book is a collection of chapters celebrating Prof. Miguel A. F. Sanjuán's achievements in nonlinear dynamics, chaos theory, and complex systems, written by some of his international colleagues, collaborators, and long-term friends.

We would like to express our sincere appreciation to the World Scientific Publishing Company for their assistance in producing this book.

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Jan Awrejcewicz
Shanmuganathan Rajasekar
Minvydas Ragulskis