



# CONFERENCE PROCEEDINGS

Professor

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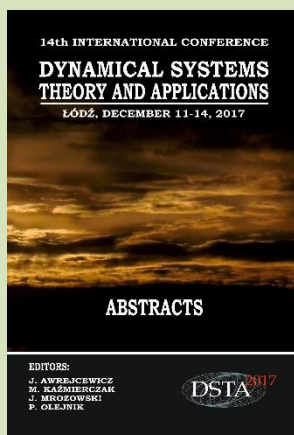
## Abstracts of the 14th International Conference on 'Dynamical Systems - Theory and Applications' (DSTA 2017)

(M. Kaźmierczak, J. Mrozowski, P. Olejnik)

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### SUMMARY



[Preface & Contents](#)

This is the thirteen time when the conference “Dynamical Systems: Theory and Applications” gathers a numerous group of outstanding scientists and engineers, who deal with widely understood problems of dynamics met in daily life.

Organization of the conference would not have been possible without a great effort of the staff of the Department of Automation, Biomechanics and Mechatronics. The patronage over the conference has been taken by the Committee of Mechanics of the Polish Academy of Sciences.

It is a great pleasure that our invitation has been accepted by so many people, including good colleagues and friends as well as a large group of researchers and scientists, who decided to participate in the conference for the first time. With proud and satisfaction we welcome nearly 170 persons from 32 countries all over the world. They decided to share the results of their research and many years experiences in a discipline of dynamical systems by submitting many very interesting papers.

This booklet contains a collection of abstracts, which have gained the acceptance of referees and have been qualified for publication in the conference proceedings. Included abstracts belong to the following topics:

- asymptotic methods in nonlinear dynamics,
- bifurcation and chaos in dynamical systems,
- control in dynamical systems,
- dynamics in life sciences and bioengineering,
- engineering systems and differential equations,
- non-smooth systems
- mathematical approaches to dynamical systems
- original numerical methods of vibration analysis,
- stability of dynamical systems,
- vibrations of lumped and continuous systems,
- other problems.

Our previous experience shows that an extensive thematic scope comprising dynamical systems stimulates a wide exchange of opinions among researchers dealing with different branches of dynamics. We think that vivid discussions

will influence positively the creativity and will result in effective solutions of many problems of dynamical systems in mechanics and physics, both in terms of theory and applications.

We do hope that DSTA 2017 will contribute to the same extent as all the previous conferences to establishing new and tightening the already existing relations and scientific and technological co-operation between both Polish and foreign institutions.