Provided for non-commercial research and educational use. Not for reproduction, distribution or commercial use.

PLISKA studia mathematica

ПЛИСКА математически студии

The attached copy is furnished for non-commercial research and education use only. Authors are permitted to post this version of the article to their personal websites or institutional repositories and to share with other researchers in the form of electronic reprints. Other uses, including reproduction and distribution, or selling or licensing copies, or posting to third party websites are prohibited.

> For further information on Pliska Studia Mathematica visit the website of the journal http://www.math.bas.bg/~pliska/ or contact: Editorial Office Pliska Studia Mathematica Institute of Mathematics and Informatics Bulgarian Academy of Sciences Telephone: (+359-2)9792818, FAX:(+359-2)971-36-49 e-mail: pliska@math.bas.bg

PREFACE

Third International conference on New Trends of the Applications of Differential Equations in Sciences (NTADES 2016) was organized by the Department of Differential Equations and Mathematical Physics at Institute of Mathematics and Informatics, Bulgarian Academy of Sciences (www.math.bas.bg/ntades) from 4-th to 9-th July, 2016. It was dedicated to the 70 Anniversary of Academician Petar Popivanov.

Differential equations have a lot of applications in many natural phenomena. This conference was devoted to such applications. During the conference invited and contributed papers were presented. Main topics were: Mathematical Physics; Mathematical Finance; Mathematical Biology; Nonlinear waves; Fractional Analysis; Neuroscience. Invited speakers were: Prof. Ravi P. Agarwal, Department of Mathematics, Texas A&M University-Kingsville, USA; Prof. Martin Bohner, Missouri S&T, Department of Mathematics, USA; Prof. Pietro Zecca, University of Florence, Italy; Prof. Vladimir Georgiev, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences and University of Pisa, Italy; Prof. Vladimir Gerdjikov, Institute of Mathematics and Informatics, Institute for Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences and Prof. Petar Popivanov, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences

NTADES 2016 was organized in cooperation with Society of Industrial and Applied Mathematics (SIAM).



The conference provided a wide range of problems concerning recent achievements in both theoretical and applied mathematics. The main goal was to present new ideas and research for scientists, who develop and study differential equations, and researchers, who apply them for solving real life problems. The conference promoted basic research in mathematics leading to new methods and techniques useful for applications of differential equations. More than 50 participants from universities and institutes of different countries — Italy, Japan, Greece, USA, Ireland, Canada, Russia, Germany, China, etc. took part in NTADES 2016. They represented most of the strongest research groups in the fields of differential equations and applied mathematics. We are very glad to report that many young researchers, Post Docs and Ph.D. students participated in NTADES 2016.

Prof. Angela Slavova Chair of the Program Committee NTADES 2016