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СТУДИИ

PREFACE

Fifth International conference on New Trends of the Applications of Differential Equations in Sciences (NTADES 2018) was organized by the Department of Differential Equations and Mathematical Physics of the Institute of Mathematics and Informatics, Bulgarian Academy of Sciences (`www.math.bas.bg/ntades`) from 18-th to 21-st June, 2018. The Conference was in cooperation with Society of Industrial and Applied Mathematics (SIAM) which is the major international organization for Industrial and Applied Mathematics and its role is very important in the Republic of Bulgaria for promotion of interdisciplinary collaboration between applied mathematics, science and engineering.

This conference was devoted to many applications of differential equations in different fields of the science, as physics, chemistry, biology, medicine, ecology, neuroscience, finance, etc. During the conference invited and contributed papers were presented. Main topics were:
– Mathematical Physics;
– Mathematical Finance;
– Mathematical Biology;
– Nonlinear waves;
– Neuroscience.

During the conference wide range of problems concerning recent achievements in both theoretical and applied mathematics were presented. The main goal was to exchange new ideas and research between scientists, who develop and study the theory of differential equations, and researchers, who apply them for solving real life problems.

More than 50 participants from universities and institutes of different countries as Australia, Italy, Japan, China, Ireland, Russia, Germany, Poland, etc. took part in NTADES 2018. They represent most of the strongest research groups in the fields of differential equations and applied mathematics. We are very glad to report that special sessions for young researchers, Post Docs and Ph.D. students were organized during NTADES 2018.

Angela Slavova
Chair of the Program Committee
NTADES 2018

Invited Speakers

Prof. Nikolay Vitanov, Institute of Mechanics, Bulgarian Academy of Sciences;

Prof. Vladimir Georgiev, Institute of Mathematics and Informatics,
Bulgarian Academy of Sciences and
Department of Mathematics, University of Pisa, Italy;

Prof. Tohru Ozawa, Department of Applied Physics, Waseda University, Tokyo,
Japan;

Prof. Nikolai Nikolov, Institute of Mathematics and Informatics,
Bulgarian Academy of Sciences;

Dr. Maria Trybula, Jagiellonian University, Krakow, Poland;

Prof. Petar Popivanov, Institute of Mathematics and Informatics,
Bulgarian Academy of Sciences.

Program Committee

Prof. Angela Slavova – BAS (Chair)

Dr. Alexander Stefanov – BAS (Secretary)

Prof. Emil Manoah, Institute of Mechanics, Bulgarian Academy of Sciences

Prof. Rossen Ivanov, SIAM representative, School of Mathematical Sciences,
Dublin Institute of Technology, Dublin 8, Ireland

Prof. Elena Litsyn, Ben Gurion University, Israel

Prof. Alexander Domoshnitsky, Ariel University of Samaria, Israel

Prof. Velizar Pavlov, University of Russe, Russe

Prof. Ronald Tetzlaff, Technical University of Dresden, Dresden (Germany)

Prof. Alon Ascoli, Technical Univeristy of Dresden, Dresden (Germany)

Prof. Pietro Zecca, Univeristy of Florence, Florence, Italy