

Preface

These proceedings contain the papers of the 47th International Youth School-conference “Modern Problems in Mathematics and its Applications” (MPMA2016) held at the Krasovskii Institute of Mathematics and Mechanics (IMM UrB RAS) in Yekaterinburg (Russia) on the January 31st – February 6th, 2016. MPMA aims to bring together researchers from pure and applied mathematics as well as computer science. The topics in mathematics include algebra, calculus, differential equations, optimal control problems and differential games, topology and geometry, mathematical modelling and numerical methods. The topics in computer science embrace theoretical informatics, technical vision, robotics, parallel and distributed calculations.

We selected 39 long papers, including 3 invited, from a total of 49 submissions. Each submitted paper was reviewed by members of the programme committee. We would like to thank the keynote speakers, the programme committee, the authors of the papers, and the participants, for without these people there would be no conference.

Scientific chairs

Nikolay Antonov, Alexey Danilin, Mikhail Khachay, Dmitry Khlopin, Alexandr Makhnev, Marina Prokhorova, Andrey Sozykin (Krasovskii Institute of Mathematics and Mechanics), Vladimir Pimenov, and Svyatoslav Solodushkin (Ural Federal University).

Local organization committee

Pavel Chistyakov, Igor Itkin, Vladislav Kabanov, Liudmila Kamneva, Dmitry Khlopin, Valeria Kolpakova, Natalia Maslova, Ekaterina Neznakhina, Alexandr Osipov, Maksim Pasyukov, Sergei Pravdin, Aleksei Rodin, and Dmitry Ustalov (Krasovskii Institute of Mathematics and Mechanics).

Programme committee

We acknowledge the efforts of the programme committee, namely Nikolay Antonov, Yurii Averboukh, Alexey Danilin, Mikhail Khachay, Dmitry Khlopin, Victor Kostousov, Alexandr Makhnev, Natalia Maslova, Denis Perevalov, Marina Prokhorova, Andrey Sozykin (Krasovskii Institute of Mathematics and Mechanics), Vladimir Pimenov, and Svyatoslav Solodushkin (Ural Federal University).

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