

Preface

These proceedings contain the papers of the 48th International Youth School-conference “Modern Problems in Mathematics and its Applications” SoProMat-2017 («Современные проблемы математики и ее приложений», СоПроМат-2017) held at the Krasovskii Institute of Mathematics and Mechanics (IMM UrB RAS) in Yekaterinburg (Russia) on the 5th – 11th February, 2017. SoProMat aims to bring together researchers from pure and applied mathematics as well as computer science. The topics in mathematics include algebra, approximation of functions, functional analysis, differential equations, optimal control problems and differential games, topology and geometry, mathematical modelling and numerical methods, mathematical biology. The topics in computer science embrace theoretical informatics, technical vision, robotics, parallel and distributed calculations.

We received 110 abstracts and chose 103 of them to be presented as oral talks. Moreover, 14 plenary invited talks were given. After the conference, we selected 40 long papers, including 2 invited, from a total of 46 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

Yurii Averboukh, Alexey Danilin, Mikhail Gomoyunov, Mikhail Khachay, Dmitry Khlopin, Victor Kostousov, Alexander Kovalevsky, Alexandr Makhnev, Denis Perevalov, Sergei Pravdin (Krasovskii Institute of Mathematics and Mechanics), Ivan Simonov (Ural Federal University).

Local organization committee

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Programme committee

We appreciate the efforts of the programme committee, namely Yurii Averboukh, Alexey Danilin, Mikhail Gomoyunov, Mikhail Khachay, Dmitry Khlopin, Victor Kostousov, Alexander Kovalevsky, Alexandr Makhnev, Natalia Maslova, Alexandr Osipov, Denis Perevalov, Sergei Pravdin, Andrey Sozykin (Krasovskii Institute of Mathematics and Mechanics), Ivan Simonov (Ural Federal University).

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