Special Issue

Mesh Methods - Numerical Analysis and Experiments

Message from the Guest Editors

Mathematical models of different natural processes are described by differential equations, systems of PDEs and integral equations. In most cases, the exact solution of such problems cannot be determined, so we have to use mesh methods to calculate an approximate solution using high performance computational complexes. These methods include the finite element method, the finite difference method, the finite volume method and combined methods.

In this Special Issue, we propose to publish qualitative works on theoretical studies of grid methods on approximation, stability, and convergence, as well as the results of numerical experiments confirming the effectiveness of the developed methods. New methods for boundary value problems with singularity, with a complex geometry of the domain boundary, and for non-linear equations are of particular interest. Articles concerning analysis of the numerical methods developed for the computation of mathematical models in different areas of applied science and engineering applications will be welcome.

Guest Editors

Prof. Dr. Viktor A. Rukavishnikov

Prof. Pedro M. Lima

Prof. Ildar B. Badriev

Deadline for manuscript submissions

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Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

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