

Special Issue

Applied Mathematics and Mechanics 2019

Message from the Guest Editors

The advances in technology and material science have required constitutive modeling of modern materials and the formulation of computational tools necessary for their analyses. For example, many new designs, such as microelectromechanical and nanoelectromechanical systems (MEMS and NEMS), smart materials and multifunctional materials, are inherently multiphysic and require rigorous constitutive modeling. ... Theoretical and computational tools, including but not limited to multiscale and high-order methods, rigorous analysis of numerical errors and efficiency, homogenization schemes, and efficient approaches for the solution of discrete lattices, periodic media, and ordinary, partial and stochastic partial differential equations are a few of the relevant topics.

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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