Editorial

Well-Posed and Ill-Posed Boundary Value Problems for PDE

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The studies of well-posed and ill-posed local and nonlocal boundary value problems for partial differential equations are driven not only by a theoretical interest but also by the fact that several phenomena in engineering, various fields of physics and financial mathematics can be modeled and investigated in this way.

The present special issue is devoted to the publication of high-quality research papers in the fields of the construction and investigation of analytic and numerical methods for solutions of well-posed and ill-posed boundary value problems for partial differential equations.

The issue covers a wide variety of problems for different classes of ordinary and partial differential equations, as well as dynamic equations on time scales. The topics discussed in the contributed papers are traditional for qualitative theory of differential equations. The issue contains papers on the global well-posedness of the viscous two-component Camassa-Holm system, local and global existence of solutions for a generalized Camassa-Holm equation, global solutions for the Cauchy problem of a Boussinesq-type equation, exact asymptotic expansion of singular solutions for the $(2 + 1)$-D Protter problem, on the regularity for variational evolution integrodifferential in equalities, right-hand side identification problem arising in biofluid mechanics, regularized solutions of optimal control problem in a hyperbolic system, generalized localization of Fourier inversion associated with an elliptic operator for distributions and Kamenev-type oscillation criteria for the second-order nonlinear dynamic equations with damping on-time scales. Furthermore, classification