



Special Issue on Optimization

Call for Papers

In literal sense, the term “**optimization**” is derivative of a Latin word “*optimus*” (the best, perfect) and means a choice of the best (optimal) variant among set of possible ones (the best of possible). At the same time, it means the section of the mathematical theory originating in antique history. In a narrow sense, optimization is connected with a finding of the maximal or minimal values of any real function on a given set. More broadly, optimization means a search in this or that generalized sense of optimal objects of any nature among a given set of possible (admissible) ones. On the one hand, the mathematical theory of optimization essentially leans on classical sections of mathematics among which, first of all, it is necessary to point to such section as Analysis. On the other hand, tendencies of development of the optimization as the mathematical theory, gave at various times an impulse to development of these classical sections, in particular, Analysis (one of vivid examples is the section of abstract differentiation in the contemporary functional analysis). Being inseparably linked with other areas of mathematics, modern optimization includes many the important sections, which differ by a type of used optimality criterions (objective functions, functionals) and sets of admissible (possible) elements. Optimization can be finite-dimensional and infinite-dimensional, constrained and unconstrained, convex and nonconvex (nonlinear), scalar and vector, deterministic and stochastic, smooth and nonsmooth, discrete and continuous. One of the major sections of contemporary optimization is the one connected with numerical methods as well as with wide application of the modern computers and computer science for solving various applied problems. The modern development of the mathematical theory, in the fields of both pure and applied mathematics, and development of modern natural sciences in general, are impossible to imagine without optimization theory.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on exploring in the wide field of **Optimization**.

Authors should read over the journal’s [Author’s Guidelines](#) carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal [Paper Submission System](#).

Please kindly notice that the “**Special Issue**” under your manuscript title is supposed to be specified and the research field “**Special Issue - Optimization**” should be chosen during your submission.

According to the following timetable:

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