Special Issue

Optimal Experimental Design and Statistical Modeling

Message from the Guest Editors

In the last few years, researchers have applied the ideas of their methodological developments of Optimal Experimental Design to different multidisciplinary areas such as engineering, biomedical and pharmaceutical research, spatial sampling, epidemiological studies, social studies, and drug development. The Big Data boom has made an impact in this field in what is referred to as active learning. Nowadays, the challenge to develop a basis for suggesting designs in nonstandard situations has received particular attention. This Special Issue will focus on contributions to the statistical theory and practice of design. The main objective is to present the solutions that modern experimental design brings to the major challenges that arise in the different disciplines. Topics include but are not limited to: Algorithms for the design of experiments; Discrimination; Robustness of experimental designs; Reliability/Survival experimental designs; Machine learning methodologies; Experiments with mixtures; Designs for nonlinear models; Split-plot designs; Computer experiments; Multi-objective optimal design; Bayesian experimental designs, etc.

Guest Editors

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Deadline for manuscript submissions

closed (20 December 2023)

About the Journal

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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