Special Issue

Advanced Geostatistics and Data Analysis: Novel Mathematical Methods and Their Applications

Message from the Guest Editors

Driven by innovations such as stochastic modeling, high-dimensional statistics, and machine learning, geostatistics and spatial data analysis technology have been experiencing revolutionary breakthroughs. This Special Issue aims to offer a big-picture exploration of recent mathematical advances in geostatistics and data analysis in the fields of geological and environmental engineering. By assembling a variety of papers focusing on new methods of geostatistics and spatial data analysis, we highlight how emerging mathematical methods are transforming the field and enabling novel engineering applications. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but not limited to) the following:

- Multiple-scale spatial-temporal Modeling and uncertainty analysis;
- New methods for coupling geostatistics and machine learning;
- High-dimensional and non-structural spatial data analysis;
- Credibility assessment of geoscientific big data;
- Gaussian random fields;
- Nonparametric spatial regression;
- Information geometry in geostatistics;
- Interdisciplinary applications of geostatistics

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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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