Special Issue

Advances in Numerical Modeling Based on Graph Theory

Message from the Guest Editor

The Special Issue, titled "Advances in Numerical Modeling based on Graph Theory", aims to highlight recent developments in graph theoretic modeling, reflecting its growing importance and wide-ranging applications in various scientific and engineering disciplines. Graph theory is one of the most dynamic branches of mathematics, with significant theoretical and practical applications. This Special Issue aims to highlight new developments in numerical modeling based on graph theory, as well as to show its wide variety in applications and potential research questions that such modeling frameworks can support. Application areas that include physical, chemical, biological, social, or technical systems are welcome. A research question should be formulated in a way that can be used in a graph theoretic model. Simulation and optimization algorithms are also welcome. Particular focus may be concentrated on problem formulation, solution techniques, and numerical methods. This Special Issue welcomes original research articles, review articles, and short communications.

Guest Editor

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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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