

Special Issue

Mathematical Modeling and Optimization in Signal Processing

Message from the Guest Editors

To ensure the quality of communication systems, signal processing methods are widely used. In general, the key problem of signal processing can be seen as an optimization problem, which takes some selected features as its objective function, such as power consuming, bit error rate, and so on. The design of objective function is in fact a reflection of the understanding about the communication system, which is in fact a process of building mathematical models to measure the performance of communication systems. Because of these, mathematical modeling and optimization are closely related to signal processing. In this Special Issue, we will focus on collecting new topics, technologies, and knowledge about mathematical models of communication systems, especially mathematical models and optimization problems of optical fiber communication systems and optimization problems in signal processing.

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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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