

# Special Issue

## Optimization, Modeling and Data Analytic Approaches in Network Coding

### Message from the Guest Editors

Over the last decade, significant progress has been made in realizing network coding, from theory to practice. Besides improving the communication efficiency in networks, network coding can also be applied into other scenarios, such as distributed storage and caching systems. Traditional technologies face various challenges in emerging applications, like vehicular networks, industrial networks, IoT, whereas network coding is a promising candidate to overcome some of these potential challenges. This Special Issue aims to focus on realizing the potential of network coding in practice, as well as steering city development forward. Topics of interest include, but not limited to:

- Existing mathematical models in network coding;
- Optimization frameworks to enhance efficiency or reduce overhead;
- The algorithmic development of network coding problems;
- The enforcement of security and message integrity in network coding;
- Data analytic and ML approaches in network coding;
- Network coding over existing infrastructures and urban development.

Papers focusing on mathematical, modeling, and data analysis aspects related to network coding challenges are also highly welcome.

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### Guest Editors

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### Deadline for manuscript submissions

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## Mathematics

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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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