

# Special Issue

## Modeling Real-World Problems Using Complex Networks

### Message from the Guest Editors

The knowledge of a complex network of a given system provides valuable information into the system itself and its behavior. Real-world problems can be represented as a network with non-trivial topologies, where nodes represent real-world entities and the links represent the interactions between them. This type of non-trivial network, called a Complex Network, provides important information about the behavior of a complex system. The Special Issue welcomes all the papers studying the interactions between the entities, to understand the functioning of the system by predicting its effects in response to one or more causes, with applications in different areas, including but not limited to the field of genetics, complex networks in machine learning, modeling of community and human social behavior, social network analysis, healthcare and transportation systems analysis, smart cities and smart grids, renewable energy, complex relationships to enhance sustainability.

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### Guest Editors

Dr. Mario F. Pavone

Dr. Claudia Cavallaro

Prof. Dr. Vincenzo Cutello

Francesco Zito

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### Deadline for manuscript submissions

closed (25 July 2025)



## Mathematics

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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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### Editor-in-Chief

Prof. Dr. Francisco Chiclana  
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