# Matrix Equations and Their Algorithms Analysis

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## Message from the Guest Editors

Dear Colleagues,

As is well known, many problems in several areas as linear system and control theory can be described in terms of matrix equations or systems of such equations, which can take different forms, from algebraic, differential, integral, linear or nonlinear models. For this reason, matrix equations constitute one of the most fruitful fields of study in pure and applied mathematics.

However, usually, direct methods allowing us to deal with their effective resolution are not available, hence the enormous interest in their numerical treatment.

This Special Issue is intended to collect recent advancements in this area. The topics of interest for the Special Issue include, but are not limited to, numerical methods and algorithms analysis for:

- Linear matrix equations.
- Nonlinear matrix equations.
- Differential matrix equations.
- Integro matrix equations.
- Variational matrix equations.
- Optimization problems.
- Control problems.
- Algebraic equations.

In addition to the above-mentioned topics, their applications to the real world are also especially welcome.

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Special Issue

## Editor-in-Chief

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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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