Special Issue

Numerical Linear Algebra with Applications in Data Analysis

Message from the Guest Editor

Linear algebra deals with vector and matrices, which allows us to compactly manipulate data objects. On the one hand, vector and matrices are used in many mathematical theories: probability, statistics, optimization, learning, etc.; on the other hand, numerical linear algebra is used in many applications: solving linear systems of equations, linear regression in data classification, principal component analysis in data analysis, inversion of the Hessian matrix in the Newton–Raphson optimization method, ranking individuals using their social network interaction graph data, etc. Innovative numerical linear algebra tools are still needed to cope with the large amounts of data encountered in today's life applications. The purpose of this Special Issue is to gather a collection of articles reflecting new trends in numerical linear algebra with applications in data analysis. Some topics of interest are: vector space, matrix decomposition or factorization, accuracy, efficient computation, modeling, numerical stability and convergence. We welcome original research papers and review articles related to numerical linear algebra in the broad sense.

Guest Editor

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Message from the Editor-in-Chief

Axioms is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of *Axioms* is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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