mathematics

an Open Access Journal by MDPI

IMPACT FACTOR 2.2

CITESCORE 4.6

Computer Algebra in Scientific Computing

Guest Editor:

Prof. Dr. Andreas Weber
Institute for Computer Science, Bonn University, Endenicher Allee 19A, D-53115 Bonn, Germany

Deadline for manuscript submissions:
closed (31 January 2019)

Message from the Guest Editor

Dear Colleagues,

Although scientific computing is very often associated with numeric computations, the use of computer algebra methods in scientific computing has obtained considerable attention in the last two decades. Computer algebra methods are especially suitable for parametric analysis of the key properties of systems arising in scientific computing. The topics addressed in this Special Issue cover all the basic areas of scientific computing as they benefit from the application of computer algebra methods, especially in the following topics:

- algebraic and semi-algebraic computations;
- symbolic-numeric methods for differential, differential-algebraic and difference equations;
- homotopy, perturbation and series methods;
- tropical and polyhedral methods;
- complexity of algebraic algorithms;
- automated reasoning in algebra and geometry;
- applications of computer algebra in the natural sciences and engineering.

Prof. Dr. Andreas Weber
Guest Editor

mathematics

IMPACT FACTOR 2.2

CITESCORE 4.6

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.
Journal Rank: JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Contact Us

Mathematics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/mathematics
mathematics@mdpi.com
𝕏@MathematicsMDPI