

Special Issue

Trends and Prospects of Numerical Modelling in Bioengineering

Message from the Guest Editors

This Special Issue is focused on the numerical modelling of the complex problems in the field of biomechanical and biomedical engineering, which include but are not limited to:

- Cardiovascular mechanics;
- Interaction between the cardiovascular system and mechanical assist devices and/or mechanical ventilation;
- Computational biofluid dynamics;
- Clinical application of novel numerical algorithms to the biomedical engineering;
- The use of numerical simulation in education;
- Tissue and cell mechanics;
- Numerical methods applied to biomechanics;
- Computer-assisted surgery and fluid dynamics;
- Multiscale flow modelling (3D, 1D, and 0D models);
- Biomechanics in athletics;
- Movement analysis and biomechanics for endurance sports;
- Application and impact of numerical models for decision making in sport;
- Molecular and cell therapies.

Guest Editors

Prof. Dr. Claudio De Lazzari

Prof. Dr. Sivia Marconi

Beatrice De Lazzari

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Mathematics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mathematics@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University,
The Gateway, Leicester LE1 9BH, UK

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