# Special Issue

# Computational Models for Medical Images

### Message from the Guest Editor

The numerical models, can be developed based on medical images, such as CT (computer tomography). These computational models have become important non-invasive diagnostic and treatment tools within the healthcare system. The aim of this Special Issue is to attract high quality research articles focusing on computational modelling in order to explore the latest developments and trends of computational technologies in healthcare engineering via the use of medical images.The topics in this special session include, but are not limited to, the following areas:

- Imaging processing methods to develop computational models;
- Multiphysics and multiscale models developed based on the medical images;
- Evaluation of interventional surgeries such as stents, stents grants, and other implants, etc.;
- Computational fluid dynamics (CFD) and fluid structure interaction (FSI) models for cardiovascular and vascular system;
- CFD and FSI models to simulate the air flow in the respiratory system;
- Finite element (FE) models for human body movement systems, such as hip replacement;
- CFD, FE, and FSI models for sports;
- Digital wins.

### Guest Editor

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### Deadline for manuscript submissions

closed (28 February 2025)

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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

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### Author Benefits

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