



Differential Models, Numerical Simulations and Applications

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Message from the Guest Editor

Differential models, numerical methods and computer simulations are playing an increasingly important role in applied sciences. Indeed, most of the differential models inspired by real world applications have no analytical solutions. For this reason, the development of numerical methods and efficient simulation algorithms have a key role in the computation of the solutions to such problems. Moreover, since the parameters in differential models have interesting scientific interpretations and their values are often unknown, estimation techniques need to be developed for parameter identification against the measured data of observed phenomena.

Finally, computational mathematics paves the way for the validation of mathematical models and the investigation of control problems.

This Special Issue will include high-quality articles containing original research results and survey articles including prospective discussion focusing on, but not limited to, differential models, integro-differential models, numerical methods for the computation of numerical solutions and efficient algorithms for parameter estimation.

