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Special Issue Reprint

## Computational Methods and Applications for Numerical Analysis

**Edited by: Fajie Wang and Ji Lin**

The present reprint contains the 20 articles accepted and published in the Special Issue “Computational Methods and Applications for Numerical Analysis” of the MDPI “Mathematics” journal, which surround the theory, algorithms, programming, software, numerical simulation, and/or novel applications of computational methods to solve problems in engineering, science, and other disciplines related to computations. These topics include finite element methods, finite difference methods, meshless/meshfree methods, physics-informed neural networks, interpolation, approximation, optimization, numerical methods for ordinary/partial differential equations, etc. Their applications include crack propagation, acoustic analysis, elastodynamic analysis, free vibration analysis, structure and topology optimization, fractional equations, eigenvalue problems, inverse problems, etc.

Numerical analysis is an increasingly important link between pure mathematics and its application in science and technology. It is hoped that the reprint will be interesting and useful for those working in the area of numerical analysis, as well as for those with a proper mathematical background and willing to become familiar with novel applications of computational techniques, which have rapidly developed nowadays.

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