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# New Trends in Solving Partial Derivative Equations and Nonlinear Integral Equations by Splitting Techniques and Nonlinear Iterative Methods

Guest Editor:

#### Prof. Dr. Eulalia Martínez Molada

Instituto de Matemática Multidisciplinar, Universitat Politècnica de València, Valencia, Spain

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# Message from the Guest Editor

Large systems of ordinary, partial, or stochastic differential equations as well as integral equations can be treated by splitting techniques that decompose the problem, which involves dividing large operators into smaller suboperators and then reducing the computational time and obtaining additional benefits. After this process, if we have nonlinear parts, we deal with nonlinear solver schemes, such as iterative methods for nonlinear systems in Banach spaces...

Topics for this Special Issue include but are not limited to the following:

- Ordinary, partial, or stochastic differential equations, nonlinear integral equations;
  - Techniques to decompose a large problem into different parts:
    - Splitting techniques, e.g., ABsplitting, iterative splitting;
    - Time- or spatial decomposition techniques, e.g., Schwarz waveform relaxation, Picard iterations, Domain decomposition;
    - Functional- or exponential splitting methods;
    - Serial and parallel splitting techniques.

Iterative methods for conlinear systems
Local Compared to SSUE



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- Steffensen-like methods;
- Iterative methods with memory.



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#### **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

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