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Fractional Differential Equations: Theory and Application

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Message from the Guest Editor

Fractional calculus is a generalization of classical calculus, dealing with integration and differentiation operations of any positive order (and it is called "fractional" for historical reasons). It is primarily known as the basis of many applied disciplines, including fractional geometry, fractional differential equations, and fractional dynamics. However, it can be considered a branch of mathematics dealing with integral-differential equations, where integrals are of the braided type. Although the tools of fractional calculus are available and applicable in various fields of science, the study of the theory of fractional differential equations has started relatively recently and seems to deserve a standalone development of its theory in parallel with the well-known theory of ordinary differential equations.

Since efficient analytical and numerical methods still require special attention, the purpose of this Special Issue is to provide a collection of new articles that reflect recent mathematical results as well as some results in applied sciences untouched by the tools and techniques of fractional calculus.











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Message from the Editor-in-Chief

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