Special Issue

Fractional Calculus and Its Application to Arbitrary Time Scales

Message from the Guest Editors

This Special Issue is devoted to recent developments in the application of fractional calculus to time scales. In recent years, fractional (non-integer order) calculus has been applied in many fields, such as control theory for dynamical systems, nanotechnology, viscoelasticity, anomalous transport and anomalous diffusion, financial modeling, and random walks. These recent discoveries of the applications of fractional calculus have drawn the attention of many researchers in order to gain further insight into the field, including into the existence and uniqueness of solutions, asymptotic behaviour, and analytical and numerical solutions of some linear and nonlinear fractional differential equations. In 1988, the theory of time scales was introduced. Ever since then, much work has been done on time scales. Currently, the application of fractional calculus to time scales is a subject of strong interest. It is the purpose of this Special Issue to collate some of the recent developments on this subject.

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About the Journal

Message from the Editor-in-Chief

Fractal and Fractional (*Fractal Fract.*) is a scholarly online journal which provides a forum for discussion on new original models and methods in fractals and fractional calculus both from theory and applications. It is a peer-reviewed, open access journal that publishes high quality original research articles, review papers and short communications.

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