



## Fractional Dynamic Inequalities with Numerical Techniques and Its Application to Arbitrary Time Scales

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### Message from the Guest Editor

Dear Colleagues,

This Special Issue is devoted to recent developments in the theory of dynamic inequalities and fractional calculus on time scales, including numerical examples such as Hermite–Hadamard’s inequality, Gronwall–Bellman’s inequality, Hardy’s inequality, Steffensen’s inequality, Hölder’s inequality, Opial’s inequality, Ostrowski’s inequality, and Hilbert’s inequality.

Inequalities lie at the heart of mathematical analysis, which is a major and important branch of mathematics. Throughout history, many researchers have discovered a great number of inequalities that are useful in many fields of mathematics. Furthermore, dynamic inequalities that provide explicit bounds on unknown functions have proved to be useful in the study of qualitative properties of the solutions of dynamic, differential, integral, and integrodifferential equations.

Fractional calculus, the theory of integrals and derivatives of non-integer order, has an important role in mathematical analysis and applications.





# symmetry



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## Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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