

Special Issue

Recent Advances in Functional Analysis, Semigroup Theory and Difference-Differential Equations

Message from the Guest Editors

Functional analysis is a methodology that is used to explain the workings of a complex system, such as that of our physical world. There has been special interest in illustrating its connections with semigroup theory and differential–difference equations; both branches are powerful tools that can provide new and interesting results. In this Special Issue, we will show the importance of these theories with numerous applications to theoretical and physical problems. We will consider fractional difference–differential equations (in a wide sense) rather than ordinary differential–difference derivatives, as they provide an excellent instrument to describe certain processes and systems with nonlocality and memory. Consequently, these equations are used in an ever-widening range of models of physical processes, and they have attracted much attention in recent years. This research will provide new challenges to the scientific community.

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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