





an Open Access Journal by MDPI

# Asymptotic Properties of Solutions of Difference and Differential Equations

Guest Editors:

Prof. Dr. Rami Ahmad El-Nabulsi

Dr. Osama Moaaz

Dr. Omar Bazighifan

Deadline for manuscript submissions:

closed (30 December 2020)

## **Message from the Guest Editors**

Dear colleagues,

Difference and differential equations have been used since Newton's time for the understanding of physical sciences. engineering, and vitality, as well as for sport, economic, and social sciences. This is because most of the relationships between variables and laws governing both physical and engineering issues and natural phenomena can be represented by differential equations. By solving these equations, it is possible to describe and understand these issues and phenomena. However, differential equations, such as those used to solve real-life problems, may not be directly solvable, i.e., they do not have closedform solutions. Only the simplest equations admit solutions obtained from explicit formulas. Despite this, some properties of the solutions of a given differential equation may be determined without finding their exact form. If a self-contained formula for a solution is not available, the solution may be numerically approximated using computers. In this case, a recurrence relation is needed. This is an equation that recursively defines a sequence: each term of the sequence is defined as a function of the preceding terms.







IMPACT FACTOR 2.7



an Open Access Journal by MDPI

### **Editor-in-Chief**

#### Prof. Dr. Sergei D. Odintsov

1. Institució Catalana de Recerca i Estudis Avançats (ICREA), Passeig Luis Companys, 23, 08010 Barcelona, Spain 2. Institute of Space Sciences (ICE-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

## **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.

#### **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q2 (*Multidisciplinary Sciences*) / CiteScore - Q1 (*General Mathematics*); Q1 (*Physics and Astronomy*); Q1 (*Computer Science*)

#### **Contact Us**