



an Open Access Journal by MDPI

# **Chaotic Dynamics in Discrete Time Systems**

Guest Editors:

### Dr. Lazaros Moysis

Laboratory of Nonlinear Systems, Circuits & Complexity, Physics Department, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece

### Dr. Marcin Lawnik

Department of Mathematics Applications and Methods for Artificial Intelligence, Faculty of Applied Mathematics, Silesian University of Technology, 44-100 Gliwice, Poland

#### Dr. Murilo da Silva Baptista

Department of Physics, University of Aberdeen, Aberdeen AB24 3FX, UK

Deadline for manuscript submissions: closed (31 December 2023)



Message from the Guest Editors

This Special Issue aims to explore chaotic phenomena in discrete-time systems. Authors are welcome to submit their original and review works on discrete-time systems of any dimension which showcase interesting chaotic phenomena. Examples include:

- Symmetric attractors;
- Coexisting attractors;
- Hidden attractors;
- Antimonotonicity;
- Crisis;
- Bifurcations;
- Decay of correlations;
- Transient dynamics;
- Networks and multilayer networks of chaotic maps;
- Robust chaos;
- Infinite number of equilibria;
- Controllable number of equilibria;
- Controllable statistical measures;
- Techniques for constructing new maps;
- Novel tools and measures for studying chaotic maps;
- Digital implementations of the above;
- Applications of chaotic maps and their transformed versions in optimization, encryption, communications, and more.



mdpi.com/si/153333





an Open Access Journal by MDPI

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

#### **Dr. Christos Volos**

Department of Physics, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, Greece

### Message from the Editor-in-Chief

Dvnamics aims to cover the research needs of scholars working mainly with physical and chemical processes and thus focuses on the study of systems in these two fields, presenting both theoretical and experimental results. Of particular interest are papers detailing new results dynamics theory regarding differential concerning equations (ordinary differential equations, stochastic differential equations, fractional order systems, nonlinear systems, and chaos) and their discrete analogs, which consist of the mathematical base of the presented physical and chemical models. Dynamics will also publish papers concerning computational results and applications of physical and chemical processes in biology, engineering, robotics, and the other sciences, as well as papers in other areas of mathematics that have direct bearing on the dynamics of these kinds of processes.

### **Author Benefits**

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

High Visibility: indexed within Scopus, EBSCO, and other databases.

**Rapid Publication:** manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.4 days after submission; acceptance to publication is undertaken in 6.6 days (median values for papers published in this journal in the first half of 2024).

## Contact Us

*Dynamics* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/dynamics dynamics@mdpi.com X@DynamicsMdpi