# Special Issue

# Numerical and Analytical Methods for Partial Differential Equations with Integral Boundary Conditions

# Message from the Guest Editors

This Special Issue contains several relevant contributions to the study of partial differential equations with integral boundary conditions appearing in queueing theory, reliability theory, age-structured population dynamics, and age-structured epidemic dynamics. The papers are concerned with the existence and uniqueness of the time-dependent (dynamic) solution, the asymptotic behavior (asymptotic stability) of the time-dependent (dynamic) solution, the structure of the time-dependent solution, the asymptotic behavior of the system indices (time-dependent queueing length, time-dependent availability, etc.), and spectral analysis of the underlying operators which correspond to above partial-differential equations, as well as with numerical approaches.

# **Guest Editors**

Prof. Dr. Geni Gupur

College of Mathematics and Systems Science, Xinjiang University, Ürümqi, China

Dr. Zacharias A. Anastassi

Institute of Artificial Intelligence, School of Computer Science and Informatics, De Montfort University, Leicester LE1 9BH, UK

### Deadline for manuscript submissions

31 May 2026



# **Axioms**

an Open Access Journal by MDPI

Impact Factor 1.6



mdpi.com/si/253611

Axioms
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
axioms@mdpi.com

mdpi.com/journal/axioms





# **Axioms**

an Open Access Journal by MDPI

**Impact Factor 1.6** 



# **About the Journal**

## Message from the Editor-in-Chief

Axioms is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of Axioms is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

### Editor-in-Chief

### Prof. Dr. Humberto Bustince

Department of Statistics, Computer Science and Mathematics, Public University of Navarra, 31006 Pamplona, Spain

#### **Author Benefits**

#### **Open Access**

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

## **High visibility:**

indexed within SCIE (Web of Science), dblp, and other databases.

### Journal Rank:

JCR - Q2 (Mathematics, Applied)

