Special Issue

Advances in Finite-Difference Time-Domain Methods and Applications

Message from the Guest Editors

The purpose of this Special Issue is to report on novel advances and findings regarding FDTD methods and pertinent applications in the area of Computational Electromagnetics and other scientific disciplines. The main topics of interest include (but are not limited to):

- discretization schemes for curvilinear and unstructured grids;
- dispersion-relation-preserving and optimized schemes;
- space-time mesh refinement techniques;
- modeling of complex material responses;
- higher-order extensions;
- unconditionally stable and implicit–explicit formulations;
- absorbing and surface-boundary conditions;
- overlapping and non-conforming grids;
- stochastic methods;
- subcell modeling and thin-wire formulations;
- reduced-order models;
- hybridization with other computational methods;
- parallelization strategies;
- advanced applications of the FDTD method (e.g., complex problems where specific capabilities of the FDTD method are utilized); and
- novel applications of the FDTD methods.

Guest Editors

Assoc. Prof. Dr. Theodoros Zygiridis Department of Electrical and Computer Engineering, University of Western Macedonia, 50131 Kozani, Greece

Prof. Dr. Nikolaos Kantartzis

Department of Electrical and Computer Engineering, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

Deadline for manuscript submissions

closed (30 November 2021)



Axioms

an Open Access Journal by MDPI

Impact Factor 1.6



mdpi.com/si/68642

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



axioms



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)