axioms

an Open Access Journal by MDPI

IMPACT FACTOR 1.9

Discrete Curvatures and Laplacians

Guest Editors:

Dr. Emil Saucan
Department of Applied Mathematics, Braude College, Karmiel 2161002, Israel

Dr. David Xianfeng Gu
Department of Computer Science, State University of New York at Stony Brook, New York, NY 11794, USA

Deadline for manuscript submissions:
closed (31 May 2024)

Message from the Guest Editors

The artificial separation and delimitation of mathematics into “continuous” and “discrete” that sadly still permeates many curricula, thus forever skewing students’ perception, is nowhere less true than in the context of curvature and Laplacians, where the boundary is fluid and where ideas and methods from the classical setting not only influence the discrete setting, but where the latter becomes largely the mainstream, influential setting.

We therefore invite you to submit papers appertaining to the whole spectrum spanned by these notions, being they theoretical or applied, and in particular to the discretizations of curvature and Laplacians and their manifold uses in complex networks, graphics, imaging and deep learning. Including but not limited to:

- discrete curvature;
- Discrete Laplace operators;
- Ollivier Ricci curvature;
- Forman Ricci curvature;
- geometric flow and applications (Ricci curvature flow, mean curvature flow, etc.);
- Combinatorial Hodge theory;
- geometric deep learning;
- digital geometry processing;
- geometric modelling;
- information geometry.

axioms

IMPACT FACTOR 1.9

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Humberto Bustince
Department of Statistics, Computer Science and Mathematics, Public University of Navarra, 31006 Pamplona, Spain

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.

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 - Q1 (Mathematics, Applied)
Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 21.8 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2023).

Contact Us

Axioms Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/axioms
axioms@mdpi.com
𝕏@Axioms_MDPI