Special Issue

Discrete Curvatures and Laplacians

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.

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)



Axioms

an Open Access Journal by MDPI

Impact Factor 1.6



mdpi.com/si/135104

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)

