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Discrete Curvatures and Laplacians

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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.





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Message from the Editor-in-Chief

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