
DGMM 2022

2nd International Conference on Discrete Geometry and
Mathematical Morphology

Strasbourg University, France
October 24-27, 2022

Url: <https://dgmm2022.sciencesconf.org/>



We are delighted to host the 2nd International Conference on Discrete Geometry and Mathematical Morphology (DGMM 2022) in Strasbourg University, France, on October 24–27, 2022.

DGMM 2022 will be the second joint event between the two main conference series of IAPR TC18, the International Conference on Discrete Geometry for Computer Imagery (DGCI) and the International Symposium on Mathematical Morphology (ISMM).

DGMM offers the opportunity for researchers, students, and practitioners to share and discuss novel high quality research results within the fields of discrete geometry and mathematical morphology, and their applications to image processing and image analysis. Both theoretical and application-focused contributions related to these fields are welcome.

Important dates:

- * Paper submission deadline: April 11, 2022
- * Preliminary author notification: June 13, 2022
- * Rebuttal deadline: June 20, 2022
- * Final acceptance: July 4, 2022
- * Camera ready deadline: August 1, 2022
- * Conference dates: October 24-27, 2022

Main topics of interest include (but are not limited to):

- Discrete Geometry and Combinatorial Topology: grids, discrete objects, discrete model properties, digitization schemes, geometric transforms, metrics and distance transformation, skeletons, discrete tomography.
- Image Segmentation and Discrete Shape Analysis: watershed segmentation, hierarchical segmentation, color and multi-channel image segmentation, texture segmentation, discrete and combinatorial tools for segmentation and analysis, discrete shape representation, recognition and analysis, clustering of spatial data.
- Algebraic Theory: morphology on complete lattices and semilattices, representation of morphological operators, fuzzy morphology, connected operators, morphology on graphs, morphology on surface meshes and Riemannian manifolds.
- Nonlinear Scale Space Theory: morphological decompositions, morphological PDEs, level set methods, morphological wavelets, morphological regularization.
- Random sets Theory and Geometrical Probability: Boolean model for sets and functions, stochastic simulation of random media.
- $(\max, +)$ -Mathematics and Idempotent Analysis for Image and Signal Processing.
- Image Filtering: color and multi-channel morphology, morphology on tensor fields, geodesic transformations, adaptive morphology, attribute filtering.
- Computational Mathematical Morphology and Discrete Geometry: algorithms, architectures, data structures and programming paradigms for efficient implementation of morphological and discrete geometric operators and tools.
- Learning based approaches to mathematical morphology and discrete geometry.
- Applications: astronomy, geosciences and remote sensing, (bio)medical imaging, material science, data analysis, document processing, content-based information retrieval, video surveillance, industrial control, visualization.

Proceedings will be published in Springer's Lecture Notes in Computer Science (LNCS) series.

Full instructions for submitting papers and access to the submission system will soon be available on the conference website:

<https://dgmm2022.sciencesconf.org>

The Organizing Committee:

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