



1st IAPR International Conference on Discrete Geometry and Mathematical Morphology

(Fully digital remote event)

May 24-27, 2021

<https://iapr.org/dgmm2021>

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Editor's note:

Please see related [report on the Activities of TC18 Discrete Geometry and Mathematical Morphology](#).

~Jing Dong, EiC

The first edition of the new conference on Discrete Geometry and Mathematical Morphology (DGMM) was the first 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).

The conference was held entirely online with discussion sessions. All the presentations have been recorded and are available on Youtube https://www.youtube.com/playlist?list=PL61jQAsCUDRLjTQt4KU_YcivUxo1Tysi8.

The event was really successful comprising 36 high quality contributions highlighting the current trends and advances in discrete geometry and mathematical morphology, ranging from purely theoretical contributions, algorithmic

developments, or novel applications in image processing, computer vision, and pattern recognition.

Three keynotes were presented:



Maria-Jose Jimenez, "On topological analysis of cells organization in biological images"



Jesús Angulo, "Some open questions on morphological operators and representations in the deep learning era"



Cecilia Holmgren, "Split trees — A unifying model for many important random trees of logarithmic height"

DGMM2021 dedicated one session to the memory and work of Reinhard Klette (See "In

Memoriam: Reinhard Klette" [\[42:2\]](#)).

The best student paper award, sponsored by the IAPR, was won by Rémi Decelle et al. for the contribution entitled "Digital Straight Segment Filter for Geometric Description": congratulations to them!

The proceedings appeared in Springer's LNCS series (number 12708, DOI: 10.1007/978-3-030-76657-3) and a special issue with extended versions of selected outstanding contributions will be published on the Journal of Mathematical Imaging and Vision.

Given the success of this first edition, the steering committees of DGCI and ISMM have decided to send a call for organization for a second edition of DGMM https://tc18.org/docspdf/DGMM_next_conference_call.pdf