

Wednesday, September 30

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| Greeting | 8:00 - 9:00 |
| Registration and coffee Bienvenue talk | 8:00 - 8:45 8:45 - 9:00 |

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| Invited Lecture | 9:00 - 10:00 |
| Arithmetic Discrete Planes are Quasicrystals <i>Valérie Berthé</i> | |

Coffee break

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| Discrete Shape Representation, Recognition and Analysis I | 10:30 - 11:20 |
| Efficient Lattice Width Computation in Arbitrary Dimension <i>Émilie Charrier, Lilian Buzer, Fabien Feschet</i> | 10:30 - 10:55 |
| Christoffel and Fibonacci Tiles <i>Alexandre Blondin-Massé, Srečko Brlek, Ariane Garon, Sébastien Labbé</i> | 10:55 - 11:20 |

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| Discrete and Combinatorial Tools for Image Segmentation and Analysis I | 11:20 - 12:10 |
| Ellipse detection with elemental subsets <i>Peter Veelaert</i> | 11:20 - 11:45 |
| Multivariate Watershed Segmentation of Compositional Data <i>Michael Hanselmann, Ulrich Köthe, Bernhard Y. Renard, Marc Kirchner, Ron M. A. Heeren, Fred A. Hamprecht</i> | 11:45 - 12:10 |

Lunch

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| Discrete and Combinatorial Topology I | 14:00 - 14:50 |
| Topology-preserving thinning in 2-D pseudomanifolds <i>Nicolas Passat, Michel Couprie, Loïc Mazo, Gilles Bertrand</i> | 14:00 - 14:25 |
| Distances on Lozenge Tilings <i>O. Bodini, T. Fernique, É. Remila</i> | 14:25 - 14:50 |

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| Models for Discrete Geometry I | 14:50 - 15:40 |
| Arithmetization of a Circular Arc <i>Aurélië Richard, Guy Wallet, Laurent Fuchs, Eric Andres, Gaëlle Largeteau-Skapin</i> | 14:50 - 15:15 |
| Patterns in discretized parabolas and length estimation <i>Alain Daurat, Mohamed Tajine, Mahdi Zouaoui</i> | 15:15 - 15:40 |

Coffee break

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| Geometric Transforms I | 16:10 - 17:00 |
| The $\langle 3,4,5 \rangle$ curvilinear skeleton <i>Carlo Arcelli, Gabriella Sanniti di Baja, Luca Serino</i> | 16:10 - 16:35 |
| Appearance Radii in Medial Axis Test Mask for Small Planar Chamfer Norms <i>Jérôme Hulin, Édouard Thiel</i> | 16:35 - 17:00 |

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| Discrete Tomography | 17:00 - 17:50 |
| Solving some instances of the 2-color problem <i>S. Brocchi, A. Frosini, S. Rinaldi</i> | 17:00 - 17:25 |
| Grey level estimation for discrete tomography <i>K.J. Batenburg, W. van Aarle, J. Sijbers</i> | 17:25 - 17:50 |
| Social event | 18:30 - 19:30 |
| Visit of the <i>Point à Callière</i> museum | |

Thursday, October 1

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| Morning coffee | 8:30 - 9:00 |
| Invited Lecture | 9:00 - 10:00 |
| Affine connections, and midpoint formation <i>Anders Kock, IAPR Distinguished Speaker</i> | |

Coffee break

| Discrete Shape Representation, Recognition and Analysis II | 10:30 - 11:20 |
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| An Improved Coordinate System for Point Correspondences of 2D Articulated Shapes <i>Adrian Ion, Yll Haxhimusa, Walter G. Kropatsch</i> | 10:30 - 10:55 |
| Two linear-time algorithms for computing the minimum length polygon of a digital contour <i>Xavier Provençal, Jacques-Olivier Lachaud</i> | 10:55 - 11:20 |

| Fast Track I | 11:20 - 12:10 |
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| On Three Constrained Versions of the Digital Circular Arc Recognition Problem <i>Tristan Roussillon, Laure Tougne, Isabelle Sivignon</i> | |
| Convergence of binomial-based derivative estimation for C^2 noisy discretized curves <i>Henri-Alex Esbelin, Rémy Malgouyres</i> | |
| Optimal Partial Tiling of Manhattan Polyominoes <i>Olivier Bodini, Jérémie Lumbroso</i> | |
| Multiscale Discrete Geometry <i>Mouhammad Said, Jacques-Olivier Lachaud, Fabien Feschet</i> | |
| Vanishing Point Detection with an Intersection Point Neighborhood <i>Frank Schmitt and Lutz Priese</i> | |
| Multi-Label Simple Points Definition for 3D Images Digital Deformable Model <i>Alexandre Dupas, Guillaume Damiand, Jacques-Olivier Lachaud</i> | |
| Marching Triangle Polygonization for Efficient Surface Reconstruction from its Distance Transform <i>Marc Fournier, Jean-Michel Dischler, Dominique Bechmann</i> | |
| Discrete Versions of Stokes' Theorem Based on Families of Weights on Hypercubes <i>Gilbert Labelle, Annie Lacasse</i> | |
| Decomposing Cavities in Digital Volumes into Products of Cycles <i>Ainhoa Berciano, Helena Molina-Abril, Ana Pacheco, Paweł Pilarczyk, Pedro Real</i> | |
| Characterization of simple closed surfaces in Z^3 : A new proposition with a graph-theoretical approach <i>Rémy Malgouyres, Jean-Luc Toutant</i> | |

Lunch

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| Discrete and Combinatorial Tools for Image Segmentation and Analysis | 14:00 - 14:50 |
| Pixel Approximation Errors in Common Watershed Algorithms <i>Hans Meine, Peer Stelldinger, Ullrich Köthe</i> | |
| Digital Deformable Model Simulating Active Contours <i>François de Veilleville, Jacques-Olivier Lachaud</i> | |

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| Fast Track II | 14:50 - 15:40 |
| Border Operator for Generalized Maps <i>Sylvie Alayrangues, Samuel Peltier, Guillaume Damiand, P. Lienhardt</i> | |
| Computing Homology: A Global Reduction Approach <i>D. Corriveau, M. Allili</i> | |
| Surface sketching with a voxel-based skeleton <i>Jean-Luc Mari</i> | |
| Minimal Offsets that Guarantee Maximal or Minimal Connectivity of Digital Curves in nD <i>Valentin E. Brimkov, Reneta P. Barneva, Boris Brimkov</i> | |
| On the connecting thickness of arithmetical discrete planes <i>Eric Domenjoud, Damien Jamet, Jean-Luc Toutant</i> | |
| A discrete λ -medial axis <i>John Chaussard, Michel Couprie, Hugues Talbot</i> | |
| Lower and Upper Bounds for scaling factors used for Integer Approximation of 3D Anisotropic Chamfer Distance Operator <i>Didier Coquin, Philippe Bolon</i> | |
| A Novel Algorithm for Distance Transformation on Irregular Isothetic Grids <i>Antoine Vacavant, David Coeurjolly, Laure Tougne</i> | |
| Fully Parallel 3D Thinning Algorithms Based on Sufficient Conditions for Topology Preservation <i>Kálmán Palágyi, Gábor Németh</i> | |
| The 1-color problem and the Brylawski model <i>S. Brocchi, A. Frosini, S. Rinaldi</i> | |

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| Coffee | |
| Poster session | 15:40 - 18:00 |
| Gala diner | 19:00 - |

Friday, October 2

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| Morning coffee | 9:00 - 9:30 |
| Invited Lecture | 9:30 - 10:30 |
| Mathematics in Atmospheric Sciences: an Overview <i>Pierre Gauthier</i> | |

Coffee break

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| Discrete and Combinatorial Topology II | 11:00 - 11:50 |
| Jordan curve theorems with respect to certain pretopologies on Z^2 <i>Josef Šlapal</i> | 11:00 - 11:25 |
| Thinning algorithms as multivalued N-retractions <i>Carmen Escribano, Antonio Giraldo, María Asunción Sastre</i> | 11:25 - 11:50 |

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| Models for Discrete Geometry IIa | 11:50 - 12:15 |
| Universal spaces for (k, \bar{k}) -surfaces <i>J. C. Ciria, E. Domínguez, A. R. Francés, A. Quintero</i> | 11:50 - 12:15 |

Lunch

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| Models for Discrete Geometry IIb | 14:15 - 14:40 |
| A linear time and space algorithm for detecting path intersection <i>Srečko Brlek, Michel Koskas, Xavier Provençal</i> | 14:15 - 14:40 |

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| Geometric Transforms II | 14:40 - 15:30 |
| Exact, scaled image rotation using the Finite Radon Transform <i>Imants Svalbe</i> | 14:40 - 15:05 |
| Quasi-Affine Transformation in Higher Dimension <i>Valentin Blot, David Coeurjolly</i> | 15:05 - 15:30 |

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| Farewell speech | 15:30 - |
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