

4th International Workshop on Computational Topology in Image Context



May 28-30, 2012, Bertinoro, Italy

PROGRAM

Sunday, May 27th	
19:30-22:30	WELCOME BUFFET
Monday, May 28th	
9:30-10:30	Walter Kropatsch PRIP, Vienna University of Technology <i>Representing and Manipulating Cyclic Paths in Continuous and Discrete Spaces View</i>
10:30-11:00	COFFEE BREAK
11:00-11:25	J. Carnero, H. Molina-Abril, and P. Real <i>Triangle Mesh Compression and Homological Spanning Forests</i>
11:30-11:55	R. Ayala, D. Fernández-Ternero, and J.A. Vilches <i>Perfect Discrete Morse Functions on Triangulated 3-Manifolds</i>
12:00-14:00	LUNCH BREAK
14:00-14:25	A. Pacheco and P. Real <i>An Efficient Algorithm to Compute Subsets of Points in \mathbb{Z}^n</i>
14:30-14:55	A. Gutierrez, D. Monaghan, M. J. Jimenez, and N. E. O'Connor <i>Persistent Homology for 3D Reconstruction Evaluation</i>
15:00-15:30	COFFEE BREAK
15:30-15:55	P. Brendel, P. Dłotko, M. Mrozek, N. Żelazna <i>Homology Computations via Acyclic Subspace</i>
16:00-16:25	L. Čomić and L. De Floriani <i>Topological Operators on Cell Complexes in Arbitrary Dimensions</i>

Tuesday, May 29th	
9:30-10:30	Frédéric Chazal INRIA Saclay, Orsay <i>Topological Data Analysis using Distance-based Functions</i>
10:30-11:00	COFFEE BREAK
11:00-11:25	Erald Vuçini <i>Enhancing the Reconstruction from Non-uniform Point Sets using Persistence Information</i>
11:30-11:55	G. Damiand, R. Gonzalez-Diaz, and S. Peltier <i>Removal Operations in nD Generalized Maps for Efficient Homology Computation</i>
12:00-14:00	LUNCH BREAK
14:00	Visit to Ravenna
20:00	Gala dinner
Wednesday, May 30th	
9:30-10:30	M.M. Mesmoudi, L. De Floriani and P. Magillo <i>Concentrated Curvature for Mean Curvature Estimation in Triangulated Surfaces</i>
10:00-10:25	F. Peña-Cantillana, A. Berciano, D. Díaz-Pernil, and M. A. Gutiérrez-Naranjo <i>Parallel Skeletonizing of Digital Images by Using Cellular Automata</i>
10:30-11:00	COFFEE BREAK
11:00-11:25	C. Escribano, A. Giraldo, and M. A. Sastre <i>Deletion of $(26, 6)$-simple Points as Multivalued Retractions</i>
11:30-11:55	J. Heras, M. Dénés, G. Mata, A. Mörtberg, M. Poza, and V. Siles <i>Towards a Certified Computation of Homology Groups for Digital Images</i>
12:00-14:00	LUNCH BREAK
14:00-14:25	H. Wagner, P. Dłotko, and M. Mrozek <i>Computational Topology in Text Mining</i>
14:30-14:55	A. Cerri, B. Di Fabio, and F. Medri <i>Multi-scale Approximation of the Matching Distance for Shape Retrieval</i>
15:00-15:25	F. Cagliari, M. Ferri, L. Gualandri, and C. Landi <i>Persistence Modules, Shape Description, and Completeness</i>