Preface

The 6th International Workshop on Computational Topology in Image Context (CTIC 2016) took place in Marseille (France) from June 15 to 17, 2016. This conference addressed an incredibly large international audience considering the relatively small size of the community in computational topology: 35 papers were submitted originating from 15 different countries. Following a peer-reviewing process by two qualified reviewers, 24 papers were accepted and scheduled for either oral (19) or poster presentation (5). All of them appear in these proceedings.

The organization of this conference has been a rewarding experience for our research team G-Mod (LSIS laboratory) and for our research group on discrete geometry (G-Dis), part of the Research Federation in Computer Science and Interactions of Aix-Marseille (FRIIAM).

CTIC 2016 was the first edition to be endorsed by the International Association of Pattern Recognition (IAPR). It expresses an increasing interest of researchers in discrete mathematics and computer science for computational topology and its applications. This event was associated with the Technical Committee on discrete geometry IAPR-TC18. Moreover, CTIC 2016 was the second edition to be accepted for publication by Springer as a LNCS proceedings. The conference was also supported by our sponsoring institutions: Aix-Marseille Université, the LSIS laboratory, the FRIIAM Federation, the "Archimède" Excellence Laboratory (LabEx Archimède), the "Conseil Régional PACA", the "Conseil Départemental des Bouches-du-Rhône", and the City of Marseille. We also thank the engineering school "Polytech Marseille" at Aix-Marseille Université for hosting this event and providing all the necessary facilities.

The community dealing with computational topology grows a little bigger every year. CTIC was initially image-oriented when it was created in 2008 in Poitiers, France. But in 8 years, the topics moved slightly from *n*D images to more general topological objects, with application to genomics, cosmology, geology, or music analysis. Whenever it is possible to have a geometric representation of an abstract object or phenomenon, it is then possible to analyze its topology, with tools becoming more and more popular like persistent homology. The latter is actually an inescapable implement for extracting information in a structural way. This has led to a significant expansion of the number of papers dealing with persistence in the last years.

It has been a great honor for us to count on the participation of two international renowned researchers as invited speakers: Massimo Ferri (Professor of Geometry at the Engineering Faculty of the Bologna University, Department of Mathematics, Research Center for Mathematical Applications, Advanced Research Center for Electronic Systems "E. De Castro") and Pascal Lienhardt (Professor of Computer Science at the University of Poitiers, Computer Graphics team, XLIM-SIC, UMR CNRS 7252).

We would like to express our gratitude to the scientific committee members for their helpful comments, which enabled the authors to improve the quality of their contributions, and to Raphaël Maëstre for the design of the CTIC logo.

Finally, our warmest thanks go to the local Organizing Committee (Eric Remy, Aldo Gonzalez-Lorenzo, Ricardo Uribe Lobello) and to the conference secretary, Régine Martin, for their invaluable contribution to the organization of the event.

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