

# Workshop on Computational Topology in Image Context

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**Abstract** This is a short example to show how to use `ctic.cls` class to submit a paper to CTIC'2009 [1].

**Keywords** `ctic 2009`; example.

See <http://www.prip.tuwien.ac.at/events/conferences/ctic09> for more information.

## 1 Introduction

The aim of CTIC'2009 is to gather researchers dealing with the study of topological invariants from the computational point of view, and/or who want to use topological information in image applications. Indeed, people from different fields related to these studies share a growing interest in collaborating. These fields include: computational geometry, discrete geometry, geometrical modeling, algebraic topology and image processing.

The workshop will provide an opportunity for the world's leading scientists and other participants in these fields, including young researchers, to exchange ideas. It will act as a catalyst for creating new collaborations, and starting new transversal projects. To achieve this goal, participants are encouraged to present their results related to one of the topics of the workshop listed below. Research in progress can also be submitted, as well as results that have been published recently. Works related to image applications using topological invariants are particularly welcome.

## 2 Scope

The range of topics that are within the scope of the Workshop on Computational Topology in Image Context includes (but is not limited to):

- Topological invariants and their computation, homology, cohomology, linking number, fundamental groups, ...
- Algorithm optimization for image applications, transfer of mathematical tools, parallel computation, hierarchical approaches, ...
- Experimental evaluation of algorithms and heuristics,
- Numerical issues arising in implementations,
- Combinatorial or multi-resolution models,
- Discrete or computational topology,
- Geometrical modeling guided by topological constraints,
- Use of topological information in image applications

### 3 Call for papers

Authors are invited to submit their results related to one of the topics of the workshop. Research in progress can also be submitted, as well as results that have been published recently. Works related to image applications using topological invariants are particularly welcome. Papers, written in English, should not exceed 8 single-spaced pages, and should be submitted before 1 June 2009.

### References

- [1] *Workshop on Computational Topology in Image Context*, Austria, August 2009.