

”SIMPLICIALIZATION” OF DIGITAL VOLUMES

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Abstract

In this poster, we show the progress of the ongoing Excellence Project P06-TIC-02268: ”Topological Analysis of Digital Volumes” financed by Junta de Andalucía. We propose different ways of digital volume simplicialization, which allow us to obtain a final simplicial complex $S(V)$ topologically equivalent to the initial digital volume V . This is the first step of a computational algebraic topological method (AT-model) for increasing the number of computable topological features in digital volumes.

Keywords: Computational Algebraic Topology, Digital volume, simplicial complex.

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