

Lienhardt, Pascal

Extensions of the notion of map and subdivisions of a three-dimensional space. (English)

Zbl 0654.05026

STACS 88, Theoretical aspects of computer science, Proc. 5th Annu. Symp., Bordeaux/France 1988, Lect. Notes Comput. Sci. 294, 301-311 (1988).

It is well-known that a map can be described combinatorially by means of a pair of permutations acting on the set of arcs of the underlying graph. In the paper, the author proposes a combinatorial description of polyhedra, regarded as objects in 3-dimensional space, by means of a triple of permutations acting on a suitable finite set (formalizing thereby the notion of volume). Some applications of this approach to modeling are described.

[For the entire collection see [Zbl 0635.00015](#).]

Reviewer: [Jozef Širáň \(Milton Keynes\)](#)

MSC:

05C10 Planar graphs; geometric and topological aspects of graph theory

Cited in **3** Documents

Keywords:

V-map; subdivision of the 3-space; map; combinatorial description; polyhedrons