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On the isometries of ideal polyhedra. (English. French summary) Zbl 1194.57006

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From the introduction: We prove that if X is a finite complete ideal polyhedron satisfying the local CAT(-1) condition, then each isometry of X which is homotopic to the identity is the identity, provided that $\pi_1(X)$ is non-elementary. In the case $n = 2$, the local CAT(-1) condition is always satisfied. We prove also that the isometry group of X is finite. This result generalizes a theorem by *A. F. Beardon* and *B. Maskit* [Acta Math. 132, 1–12 (1974; Zbl 0277.30017)] concerning the isometries of complete hyperbolic n-manifolds.

MSC:

57M20 Two-dimensional complexes (manifolds) (MSC2010)
53C23 Global geometric and topological methods (à la Gromov); differential geometric analysis on metric spaces

Keywords:

Hyperbolic geometry; Ideal polyhedron; Isometry group; CAT (-1) space

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