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Constructions and 3-deformations of 2-polyhedra and group presentations. (English)

Zbl 0832.57001

Rocky Mt. J. Math. 24, No. 2, 629-643 (1994).

In dieser Arbeit werden einige Äquivalenzen zwischen geometrischen und algebraischen Versionen des Andrews-Curtis-Problems bewiesen. Die Sachverhalte sind zumeist bekannt [*C. Hog-Angeloni* und der Referent, Lond. Math. Soc. Lect. Note Ser. 197, 365-380, 381-407 (1993; Zbl 0814.57002); *ibid.* 1-50, 381-407 (1993; Zbl 0811.57001); *C. Hog-Angeloni* and *A. J. Sieradski*, *ibid.* 251-280, 381-407 (1993; Zbl 0811.57006); *A. J. Sieradski*, *ibid.* 51-96, 381-407 (1993; Zbl 0811.57002)]. Der Akzent der Beweise liegt in der Benutzung von 2-Komplexen allgemeiner Lage. Noch nicht publiziert wurde m.W. das Ergebnis, daß für Präsentationen, bei denen jede Erzeugende genau 3 Vorkommnisse in den Relatoren hat, im Fall von höchstens 3 Erzeugenden die Andrews-Curtis-Vermutung richtig ist.

Reviewer: W.Metzler (Frankfurt am Main)

MSC:

57M20 Two-dimensional complexes (manifolds) (MSC2010)

57M05 Fundamental group, presentations, free differential calculus

20F65 Geometric group theory

Keywords:

Andrew-Curtis conjecture; special polyhedra; special presentations; general position

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