

$$(9) \quad \cdot h^1 = \sum_{i=1}^n \cdot h_i^1 + (p - n - m + 1)g.$$

PROOF. In constructing 1-simplexes $(\cdot 0''0), \dots, (\cdot 0^{(m)}0)$ (not belonging to $\cdot \mathcal{M}^2$), we get $\cdot \mathcal{M}^{*2}, \cdot \mathcal{M}_1^{*2}, \dots$ as in the lemma. By (7) and (8), we have

$$(10) \quad \cdot h_i^{*1} = \cdot h_i^1 + (p_i - 1)g,$$

where $\cdot h_i^{*1}$ is the homology group of $\cdot \mathcal{M}_i^{*2}$. The newly constructed simplexes form a connected 1-complex whose 1-dimensional homology group contains the identity only. Therefore from a famous theorem (cf. Seifert-Threfall, p. 179), by (5) we get

$$(11) \quad \cdot h^{*1} = \sum_{i=1}^n \cdot h_i^1 + (p - n)g,$$

where $\cdot h^{*1}$ is the homology group of $\cdot \mathcal{M}^{*2}$. Therefore (9) is finally established in virtue of (11) and (8)'.

Theorem (3.5) may be extended analogously.

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A NOTE ON EQUICONTINUITY

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During a recent seminar discussion of his paper *Transitivity and equicontinuity* [1],¹ W. H. Gottschalk proposed the following question:

"Is the center of every algebraically transitive group of homeomorphisms on a compact metric space equicontinuous?"

An affirmative answer to the above question is given in this note.

1. Definitions. We let X and Y be compact metric spaces and let d be the metric for Y .

A set F of functions on X into Y is *algebraically transitive* if corresponding to each pair p and q of points in X there exists $f \in F$ such that $f(p) = q$.

A sequence $[g_n]$ of functions on X into Y converges to a function

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¹ Numbers in brackets refer to the bibliography at the end of the paper.