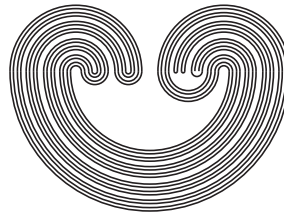


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NONHOMOGENEITY OF REMAINDERS, III

by

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NONHOMOGENEITY OF REMAINDERS, III

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ABSTRACT. We present a cardinal inequality on the number of homeomorphisms of remainders of nowhere locally compact spaces. We also discuss the question when the complement of a Σ -product in an arbitrary Cantor cube is homogeneous, or a topological group.

1. INTRODUCTION

All topological spaces under discussion are Tychonoff.

A space X is *homogeneous* if for any two points $x, y \in X$ there is a homeomorphism h from X onto itself such that $h(x) = y$. If bX is a compactification of a space X , then $bX \setminus X$ is called its *remainder*.

In this note we continue our study begun in [1, 2] concerning the (non)homogeneity of arbitrary remainders of topological spaces. We present a variation of a recent cardinal inequality in [1] on the number of homeomorphisms of remainders of nowhere locally compact spaces. By examples we demonstrate that both inequalities are independent. We also discuss the question when the complement of a Σ -product in an arbitrary Cantor cube is homogeneous, or a topological group.

2010 *Mathematics Subject Classification.* 54D35, 54D40, 54A25.

Key words and phrases. Remainder, compactification, topological group, homogeneous space.

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