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On the infinite powers of large zero-dimensional metrizable spaces

by

ANDREA MEDINI

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ON THE INFINITE POWERS OF LARGE ZERO-DIMENSIONAL METRIZABLE SPACES

ANDREA MEDINI

 $Dedicated\ to\ the\ memory\ of\ Gary\ Gruenhage$

ABSTRACT. We show that X^{λ} is strongly homogeneous whenever X is a non-separable zero-dimensional metrizable space and λ is an infinite cardinal. This partially answers a question of Terada, and improves a previous result of the author. Along the way, we show that every non-compact weight-homogeneous metrizable space with a π -base consisting of clopen sets can be partitioned into κ many clopen sets, where κ is the weight of X. This improves a result of van Engelen.

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