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## MR0031534 (11,165h) 27.2X Esenin-Voľpin, A. S.

## On the existence of a universal bicompactum of arbitrary weight. (Russian)

Doklady Akad. Nauk SSSR (N.S.) 68, (1949). 649–652

The character or weight of a topological space is the least cardinal number of a complete open basis for that space. Under the assumption that  $2^{\aleph_{\alpha}} = \aleph_{\alpha+1}$  for all ordinal numbers  $\alpha$ , the author proves that there exists a universal zero-dimensional compact Hausdorff space X of arbitrary infinite character, i.e., such that every zero-dimensional compact Hausdorff space X of the same character is a continuous image of X. This is accomplished by constructing a Boolean algebra of arbitrary infinite cardinal number such that every Boolean algebra of that cardinal number is isomorphic to a subalgebra thereof. The zero-dimensional compact Hausdorff space associated with this algebra is the desired universal space.

Reviewed by E. Hewitt

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Citations

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