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A topology on the union of the double arrow space and the integers. (English) Zbl 0632.54023
[Topology Appl.](#) 28, No. 2, 177-179 (1988).

We construct a topology on the union of the double arrow space (Cantor set version) and the integers which is a hereditarily Lindelöf hereditarily separable 0-dimensional compact Hausdorff space but not the continuous image of a closed subspace of the product of the double arrow space and the closed unit interval (answering a question of Fremlin).

MSC:

[54G20](#) Counterexamples in general topology

[54D20](#) Noncompact covering properties (paracompact, Lindelöf, etc.)

[54F05](#) Linearly ordered topological spaces, generalized ordered spaces, and partially ordered spaces

[54D30](#) Compactness

[54C05](#) Continuous maps

Cited in 1 Document

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two arrow space; double arrow space; hereditarily Lindelöf hereditarily separable 0-dimensional compact Hausdorff space; closed unit interval

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References:

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- [3] Hodel, R., Cardinal function I *handbook of set theoretic topology*, (), 1-61
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