Jan Baars Equivalence of certain free topological groups

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Abstract: In this paper we give a complete isomorphical classification of free topological groups FM(X) of locally compact zero-dimensional separable metric spaces X. From this classification we obtain for locally compact zero-dimensional separable metric spaces X and Y that the free topological groups FM(X) and FM(Y) are isomorphic if and only if $C_p(X)$ and $C_p(Y)$ are linearly homeomorphic.

Keywords: free topological groups, function spaces

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