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Sufficient conditions for the existence of 0’-limitwise monotonic functions for computable η-like linear orders

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Abstract

© 2017, Pleiades Publishing, Ltd.We find new sufficient conditions for the existence of a 0’-limitwise monotonic function defining the order for a computable η-like linear order L, i.e., of a function G such that L ∑q∈ℚG(q). Namely, we define the notions of left local maximal block and right local maximal block and prove that if the sizes of these blocks in a computable η-like linear order L are bounded then there is a 0’-limitwise monotonic function G with L = ∑q∈ℚG(q).

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Keywords

0’-limitwise monotonic function, computable linear order, η-like linear order

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