A CATEGORICAL PROPERTY OF THE STONE–ČECH COMPACTIFICATION

R. B. Beshimov

We study some categorical properties of the functor O_{β} of weakly additive functionals acting in the category Tych of the Tychonoff spaces and their continuous mappings. We show that O_{β} preserves the weight of infinite-dimensional Tychonoff spaces, the singleton, and the empty set, and that O_{β} is monomorphic and continuous in the sense of T. Banakh, takes every perfect mapping to an epimorphism, and preserves intersections of functionally closed sets in a Tychonoff space.

Key words and phrases: weakly additive functional, functor, weight.

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