

## A new class of fractional type set-valued functions

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### ABSTRACT.

The so-called ratios of affine functions, introduced by Rothblum (1985) in the framework of finite-dimensional Euclidean spaces, represent a special class of fractional type vector-valued functions, which transform convex sets into convex sets. The aim of this paper is to show that a similar convexity preserving property holds within a new class of fractional type set-valued functions, acting between any real linear spaces.

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