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The weak shape

For every category pair, such that the subcategory is dense (in the sense of expansions) and full, an (abstract) weak shape category is constructed. The key technical notions are a hyperladder and a certain homotopy relation which induce a weak shape morphism. There exists a faithful functor of the shape category to the weak shape category, and there exists a pair of continua having the same weak shape type and different shape types. Several important well known shape invariants (connectedness, trivial shape, shape dimension < n, movability, Mittag-Leffler property, strong movability) are, actually, weak shape invariant properties.

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