

Sobolev maps with values in an arbitrary metric space

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We are concerned here with Sobolev-type space of functions valued in Banach space or in metric space. We review two ways of defining Sobolev map valued in metric space: Reshetnyak's approach vs definition via post-composition with the Kuratowskii embedding. In particular we show that Sobolev map with values in dual Banach space can be described in terms of classical weak derivatives in weak* sense.