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TOPOLOGICAL PROPERTIES OF G-HAUSDORFF METRIC

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ABSTRACT

Consider a $G-$ metric space $(\mathcal{M}, Y)$, we define a general metric space with general Hausdorff metric Γ on the set К of the class of all non-empty compact subsets of $\mathcal{M}$. We show that if $(\mathcal{M}, Y)$ is complete, then the Hausdorff metric space $(К, \Gamma)$ is also complete $G-$ metric space. Similarly, the compactness. Illustrative example by using Mat lab is presented for a Cuachy sequence in $(К, \Gamma)$ also converges to the element in $(К, \Gamma)$.

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