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A CHARACTERIZATION OF THE GENERALIZED KKM MAPPINGS VIA THE MEASURE OF NONCOMPACTNESS IN COMPLETE GEODESIC SPACES

By using the measure of noncompactness, we characterize the class of generalized KKM mappings on complete geodesic spaces. Existence theorems of fixed points and the best approximation for set-valued mappings are established. Applications are also provided. The results presented in this paper improve and extend some recent results in the literature.