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ON DISCUS SPACES

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Abstract. The paper contains some fixed point theorems and a selection theorem. One of our Theorem seems to be one of the main results for non-expansive mappings and it is a far extension of Browder-Göhde-Kirk result even for uniformly convex spaces. What is more its proof is simple and natural (cp. the monograph of Dugundji and Granas [1, p. 52]). In addition we give a more thorough investigation of the properties of discus spaces (extension of uniformly convex spaces) which seem to be of importance.

Key Words and Phrases: Discus space, multivalued mapping, fixed point, selection, non-expansive mapping.

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