

## SELECTIONS OF GENERALIZED CONVEX SET-VALUED FUNCTIONS WITH BOUNDED DIAMETER

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**Abstract.** Applying the classical Banach fixed point theorem we prove that a set-valued function with bounded diameter satisfying a linear functional inclusion admits a unique selection fulfilling the corresponding functional equation. We also adopt the method of the proof for investigating the Hyers-Ulam stability of some functional equations.

**Key Words and Phrases:** Subadditive set-valued function, stability, fixed point.

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