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Ulam stability problem for generalized A -quadratic mappings. (English) Zbl 1069.39030

J. Math. Anal. Appl. 305, No. 2, 466-476 (2005).

Let U and V be real vector spaces and let $n > 1$ be a given natural number. The authors consider the functional equation

$$\sum_{i=1}^n Q\left(\sum_{j \neq i} x_j - (n-1)x_i\right) + nQ\left(\sum_{i=1}^n x_i\right) = n^2 \sum_{i=1}^n Q(x_i)$$

satisfies appropriate conditions. Then there exists a unique map

Reviewer: Jacek Chmielinski (Kraków)

MSC:

39B82 Stability, separation, extension, and related topics for functional equations

Cited in **6** Documents

39B52 Functional equations for functions with more general domains and/or ranges

Keywords:

quadratic functional equation; Ulam stability; Banach space; Banach left modules; Banach *-algebra

Full Text: [DOI](#)

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