STABILITY OF QUADRATIC DERIVATIONS OF ARUN-QUADRATIC FUNCTIONAL EQUATION

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Abstract

In this paper, the authors have established the general solution and generalized Ulam - Hyers - Rassias stability of Arun-quadratic functional equation

$$f(2x \pm y \pm z) + 2f(y) + 2f(z) = 2f(x \pm y) + 2f(x \pm z) + f(y + z)$$

on Banach algebras.

Key Words and Phrases: Quadratic functional equation, Generalized Ulam - Hyers - Rassias stability, Banach algebras.

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