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SOLUTION AND STABILITY OF MODIFIED ADDITIVE AND QUADRATIC FUNCTIONAL EQUATION IN GENERALIZED 2-NORMED SPACES

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Abstract

In this paper, author established the general solution and generalized Ulam-Hyers stability of modified additive functional equation

$$f(x+\sqrt{yz}) = f(x) + f(\sqrt{yz}) \tag{0.1}$$

and modified quadratic functional equation

$$f(x+\sqrt{yz}) + f(x-\sqrt{yz}) = 2f(x) + 2f(\sqrt{yz}) \tag{0.2}$$

with $z \neq 0$ in Generalized 2-normed space.

Key Words and Phrases : *Additive functional equation, Quadratic functional equation, Generalized Ulam-Hyers stability, Generalized 2-normed space, Generalized 2-Banach space.*

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