

HUR, UGR AND JMR STABILITIES OF A EULER-LAGRANGE QUADRATIC FUNCTIONAL EQUATION IN dq -NORMED SPACES

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Abstract

In this paper, the authors introduced and investigate the general solution and generalized Hyers-Ulam-Aoki-Rassias, Hyers-Ulam-Rassias (HUR), Ulam-Gavruta-Rassias (UGR), JMRassias (JMR) stabilities of a Euler-Lagrange quadratic functional equation

$$2f(ax + by) + 2f(bx + ay) = (a + b)^2 f(x + y) + (a - b)^2 f(x - y)$$

in dq -normed space.

Key Words : *Quadratic functional equation, Generalized Hyers-Ulam-Rassias stability, dq -normed space.*

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