

## **GENERALIZED HYERS-ULAM-RASSIAS STABILITY AND J. M. RASSIAS STABILITY OF A QUADRATIC FUNCTIONAL EQUATION**

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### **Abstract**

In this paper, we obtain the general solution of a new quadratic functional equation  $f(2x - y) + f(2y - z) + f(2z - x) + f(x + y + z) - f(x - y + z) - f(x + y - z) - f(x - y - z) = 3f(x) + 3f(y) + 3f(z)$  and investigate its generalized Hyers-Ulam-Rassias stability and J. M. Rassias stability for the above functional equation.

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Key Words and Phrases: Quadratic Functional Equation, Generalized Hyers-Ulam-Rassias Stability, J. M. Rassias Stability.

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