International J. of Math. Sci. \& Engg. Appls. (IJMSEA)
ISSN 0973-9424, Vol. 8 No. III (May, 2014), pp. 297-307

# HYPER STABILITY OF THE QUADRATIC FUNCTIONAL EQUATION 

K. RAVI ${ }^{1}$, S. RAMALINGAM ${ }^{2}$ AND A. EDWIN ${ }^{3}$<br>${ }^{1,2}$ PG \& Research Department of Mathematics, Sacred Heart College, Tirupattur - 635 601,<br>Vellore Dist, Tamil Nadu, India<br>${ }^{3}$ Department of Mathematics, St. Josephs College of Arts \& Science, Manjakuppam, Cuddalor-607001, Tamilnadu, India


#### Abstract

In this paper, authors investigate the Hyper Stability of the quadratic functional equation $h(a+b+c)+h(a)+h(b)+h(c)=h(a+b)+h(b+c)+h(c+a)$ on restricted domain. The main aim of this paper is to investigate that if $h$ satisfies a stability inequality related to the above equation then it is also a solution of the equation.


Key Words : Hyper Stability, Quadratic functional equation, Restricted domain, Fixed point theorem, Hyers-Ulam stability, Dry gas functional equation.

2000 AMS Subject Classification : 39B22, 39B52, 39B72.
(c) http: //www.ascent-journals.com

