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Title: Stability of a quadratic functional equation on semigroups

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The stability problem of the functional equation of the form

$$f(x + 2y) + f(x) = 2f(x + y) + 2f(y),$$

is investigated. We prove that if the norm of the difference between left-hand side and right-hand side of the equation is majorized by a function ω of two variables having some standard properties then there exists a unique solution F of our equation and the norm of differences between F and the given function f is controlled by a function depending on ω .

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