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 \( \omega \) 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 \( \omega \).

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