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Title: On (ψ, γ) -stability of Cauchy equation on some noncommutative groups

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In this paper, the (ψ, γ) -stability of the Cauchy functional equation is investigated on some noncommutative groups. It is shown that if γ is invariant with respect to inner automorphisms of a step-two solvable group G , then the Cauchy equation $f(xy) = f(x) + f(y)$ is (ψ, γ) -stable on G . If ψ satisfies the condition $\lim_{n \rightarrow \infty} \frac{\psi(n^2)}{n} = 0$, then the Cauchy equation is (ψ, γ) -stable on step-two solvable groups and also on step-three nilpotent groups.

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