

**عنوان مقاله:**

Asymptotic behavior of a radical quadratic functional equation in quasi- $\beta$ -Banach spaces

**محل انتشار:**

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**خلاصه مقاله:**

Let  $\mathbb{R}$  be the set of real numbers and  $(Y, \|\cdot\|)$  be a real quasi- $\beta$ -Banach space. In this paper, we prove the Hyers-Ulam stability on a restricted domain in quasi- $\beta$ -spaces for the following two radical functional equations  $\sqrt{x^2 + y^2} = f(x) + f(y)$  and  $\sqrt{x^2 + y^2} = g(x) + f(y)$  where  $f, g: \mathbb{R} \rightarrow Y$ . Also, we discuss an asymptotic behavior for these equations.

**کلمات کلیدی:**

radical functional equation, Hyers-Ulam stability, quasi- $\beta$ -normed spaces, restricted domain

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