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APPROXIMATE PEXIDERIZED CAUCHY'S ADDITIVE TYPE MAPPINGS

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Abstract. We prove the stability of the Pexiderized Cauchy's additive functional equation with a general form;

$$f(x+y) = g(x) + h(y) + \lambda(x,y)$$

where $\lambda(x,y)$ is a logarithm of a pseudo exponential function. From this result, we obtain the stability with the following form;

$$\frac{1}{1+\phi(x,y)} \leqslant \frac{f(x+y)}{e(x,y)g(x)h(y)} \leqslant 1+\phi(x,y),$$

where $e(x,y)$ is a pseudo exponential function. It is a generalized result for the stability of the Pexiderized Cauchy's functional equation.

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