

HYERS–ULAM STABILITY OF FIRST ORDER LINEAR PARTIAL DIFFERENTIAL EQUATIONS WITH CONSTANT COEFFICIENTS

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Abstract. In this paper, we prove the Hyers-Ulam stability of first order linear partial differential equations with constant coefficients

$$au_x(x, y) + bu_y(x, y) + cu(x, y) + d = 0,$$

where $a, b \in \mathbb{R}$ and $c, d \in \mathbb{C}$ are constants with $\Re(c) \neq 0$ and $\Re(c)$ denotes the real part of c .

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