

STABLE SEMINORMS REVISITED

RICHARD ARENS, MOSHE GOLDBERG* AND W. A. J. LUXEMBURG

Abstract. A seminorm S on an algebra \mathcal{A} is called *stable* if for some constant $\sigma > 0$,

$$S(x^k) \leq \sigma S(x)^k \quad \text{for all } x \in \mathcal{A} \quad \text{and all } k = 1, 2, 3, \dots$$

We call S *strongly stable* if the above holds with $\sigma = 1$. In this note we use several known and new results to shed light on the concepts of stability. In particular, the interrelation between stability and similar ideas is discussed.

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