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ON THE CAUCHY—RASSIAS INEQUALITY AND LINEAR n–INNER PRODUCT PRESERVING MAPPINGS

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Abstract. We prove the Cauchy–Rassias stability of linear n-inner product preserving mappings in n-inner product Banach spaces. We apply the Cauchy-Rassias inequality that plays an influencial role in the subject of functional equations. The inequality was introduced for the first time by Th. M. Rassias in his paper entitled: On the stability of the linear mapping in Banach spaces, Proc. Amer. Math. Soc. **72**, (1978), 297–300.

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