SOME CHARACTERIZATIONS OF INNER PRODUCT SPACES BY INEQUALITIES

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Abstract. In this paper we present some new characterizations of inner product spaces by using inequalities. First, we explore a classical idea consisting in the transformation of the parallelogram law into an inequality. Then we give some characterizations by using convex and Wright-convex functions.


Keywords and phrases: Characterization of inner product spaces, norm inequality, convex function, Wright-convex function.

REFERENCES


