Title: Inner product space and circle power

Author(s): Damjan Kobal

In this paper we present a norm equality which, in its most general form with a free parameter, characterizes an inner-product space with no use of triangle inequality and homogenity. For any given fixed parameter the equality characterizes an inner-product space with no use of triangle inequality. The proof of the main theorem reduces to the consideration of the system of functional equations.

Address:
Damjan Kobal
Department of Mathematics
Faculty of Mathematics and Physics
University of Ljubljana
Jadranska 19
1000 Ljubljana
Slovenia