عنوان مقاله:

Polarization constant \mathcal{K}(n,X)=۱ for entire functions of exponential type

محل انتشار:

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خلاصه مقاله:

In this paper we will prove that if L is a continuous symmetric n-linear form on a Hilbert space and \widehat{L} is the associated continuous n-homogeneous polynomial, then ||L||=||\widehat{L}||. For the proof we are using a classical generalized inequality due to S. Bernstein for entire functions of exponential type. Furthermore we study the case that if X is a Banach space then we have that|L|=|\widehat{L}|, \forall L \in{\mathcal{L}}^{s}(^{n}X).If the previous relation holds for every L \in {\mathcal{L}}^{s}\left(^{n}X\right), then spaces {\mathcal{P}}\left(^{n}X\right) and L \in {\mathcal{L}}^{s}(^{n}X) are isometric. We can also study the same problem using Fr\acute{e}chet derivative.

کلمات کلیدی:

Polarization constants, polynomials on Banach spaces, polarization formulas

لینک ثابت مقاله در پایگاه سیویلیکا: