

SEPARATION THEOREMS FOR NONCONVEX SETS IN SPACES WITH NON-SYMMETRIC SEMINORM

G. E. IVANOV AND M. S. LOPUSHANSKI

Abstract. The theory of weakly convex sets in Banach spaces with non-symmetric seminorm is developed. The separation theorem with sphere or (in a general case) with the boundary of a shifted quasiball for two closed disjoint subsets of a Banach space, one of which is prox-regular or weakly convex, and the other is the summand of a ball or quasiball is proven.

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