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## On Well Posed Best Approximation Problems for a Nonsymmetric Seminorm

Let M be a closed convex (generally unbounded) subset of a Banach space Ewith 0 being an interior point of M, A be a closed subset of E. Let  $T_M(A)$  be the set of all  $x_0 \in E$  such that the problem  $\min_{a \in A} \mu_M(x_0 - a)$  is well posed, where  $\mu_M$  is the Minkowski functional of M, so  $\mu_M$  is a nonsymmetric seminorm. We obtain some asymptotic properties (appearance far from the origin) of M which are necessary and/or sufficient for  $S_M^{\text{int}}(A) \setminus T_M(A)$  to be a meagre or a  $\sigma$ -porous subset of

$$S_M^{\text{int}}(A) = \left\{ x_0 \in E \Big| \ 0 < \varrho_M(x_0, A) < \sup_{x \in E} \varrho_M(x, A) \right\} ,$$

where  $\varrho_M(x, A) = \inf_{a \in A} \mu_M(x - a).$ 

**Keywords**: Best approximation, Minkowski functional, residual set, sigmaporous set.

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