

Demo mode: there is a limit of max. 3 allowed answers for unregistered users Subscription and pricing information

Your query: (AU is (are) "PAP\*;SINGER\*")

Answers 1-1 (out of 1)

[Back to query form]

421.41017 Papini, Pier Luigi; Singer, Ivan

Best coapproximation in normed linear spaces. (English)

[J] Monatsh. Math. 88, 27-44 (1979). [ISSN 0026-9255]

Keywords: normed linear spaces; elements of best coapproximation; spaces of continuous functions

Classification: \*41A50 Best approximation 41A65 Abstract approximation theory

Display Type [html.....] Format [complete] Online ordering services: Order !

Answers 1-1 (out of 1)

[Back to query form]

MATH Database, Zentralblatt für Mathematik / Mathematics Abstracts: Copyright (c) 1997 European Mathematical Society, FIZ Karlsruhe & Springer-Verlag.

Your query: (AU is (are) "RAO, G\*") and (TI contains the words "COAPP\*")

Answers 1-3 (out of 6)

726.41034 Rao, Geetha S.; Swaminathan, M.

Best coapproximation and Schauder bases in Banach spaces. (English)

[J] Acta Sci. Math. 54, No.3/4, 339-354 (1990). [ISSN 0001-6969]

An attempt is made for the first time, to characterise bases in Banach spaces in terms of best coapproximation. Certain norms are introduced using best coapproximation in which the given bases are monotone, strictly monotone, comonotone or strictly comonotone. Equivalent norms are defined, in which the given bases possess special properties. The analogous theory is detailed in Banach spaces having unconditional bases. [ G.S.Rao ] Keywords: bases in Banach spaces; best coapproximation

Classification: \*41A65 Abstract approximation theory 46E15 Banach spaces of functions defined by smoothness properties 41A50 Best approximation

657.41021 Rao, Geeta S.; Muthukumar, S.

Semi-continuity properties of the coapproximation operator. (English)

[J] Math. Today 5, 37-48 (1987).

Let  $E$  be a normed linear space,  $G$  a linear subspace of  $E$  and  $x \in E$ . Any element  $g_0 \in G$  satisfying  $\|g_0 - g\| \leq \|x - g\|$  ( $g \in G$ ) is called an element of best coapproximation of  $x$  by means of the elements of  $G$ . The set of all such elements  $g_0$  is denoted by  $R_G(x)$ . The authors continue the investigation of the semi-continuity properties of the set-valued mapping  $R_G$  initiated by *P. L. Papini* and *I. Singer* [Monatsh. Math. 88, 27-44 (1979); Zbl. 421.41017]. The following properties are studied: upper semi-continuity, lower semi-continuity, weak semi-continuity, Hausdorff semi-continuity and radial continuity. The proofs are, in general, similar to those in the case of metric projection  $P_G$ . [ R.Precup ] Citations: Zbl.421.41017 Keywords: upper semi-continuity; lower semi-continuity; weak semi-continuity; Hausdorff semi-continuity; radial continuity; metric projection

Classification: \*41A65 Abstract approximation theory 41A50 Best approximation

646.41025 Rao, Geetha S.; Chandrasekaran, K.R.

Characterizations of elements of best coapproximation in normed linear spaces. (English)

[J] Pure Appl. Math. Sci. 26, 139-147 (1987). [ISSN 0379-3168]

Let  $E$  be a real or complex linear space and  $G$  a non-empty subset of  $E$ . An element  $g_0 \in G$ , is said to be an element of best coapproximation of  $x \in E$  by the elements of  $G$  if  $\|g_0 - g\| \leq \|x - g\|$  for every  $g \in G$ . Some characterization theorems for elements of best coapproximation in a normed linear space are provided. Also, characterization theorems for the specific spaces like  $C(Q)$ ,  $C_E(Q)$ ,  $L^1(T, \nu)$  and  $L^\infty(T, \nu)$  are established separately. [ D.N.Zarnadze ] Keywords: best coapproximation; characterization theorems; elements of best coapproximation

Classification: \*41A65 Abstract approximation theory 41A50 Best approximation

Your query: (AU is (are) "RAO, GE\*") and (PY ="1991-1998")

Answers 1-2 (out of 2)

970.50188 Rao, Geetha S.; Swaminathan, M.

On normal bases. (English)

[J] Bull. Calcutta Math. Soc. 88, No.2, 107-112 (1996). [ISSN 0008-0659]

Classification: \*46-99 Functional analysis

774.47029 Rao, Geetha S.; Bhaskaramurthi, T.L.

Nonexpansive mappings and proximality in normed almost linear spaces. (English)

[CA] Functional analysis and operator theory, Proc. Conf. Mem. U. N. Singh, New Delhi/India 1990, Lect. Notes Math. 1511, 80-87 (1992).

[For the entire collection see Zbl. 745.00065.]

This article deals with some properties of the fixed point set of nonexpansive operators mapping a convex set into itself in normed almost linear spaces. The main result is a generalization of *J. B. Prolla's* theorem [Approximation theory IV, Texas A& M Univ. 1983, 663- 666 (1983; Zbl. 539.41033)]. [ P.Zabreiko (Minsk) ] Citations: Zbl.745.00065; Zbl.539.41033 Keywords: fixed point set of nonexpansive operator mapping a convex set into itself; normed almost linear spaces

Classification: \*47H09 Mappings defined by "shrinking" properties 47H10 Fixed point theorems for nonlinear operators on topol.linear spaces 41A65 Abstract approximation theory