

## ITERATIVE ALGORITHM FOR ZEROS OF BOUNDED MULTI-VALUED ACCRETIVE OPERATORS

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**Abstract.** Let  $E$  be a uniformly smooth real Banach space and  $A : E \rightarrow 2^E$  a multi-valued mapping. An efficient iteration algorithm for approximating zeros of  $A$ , in the case that  $A$  is  $m$ -accretive and bounded, is studied and the sequence of the algorithm is proved to converge strongly to a point in  $A^{-1}(0)$ . We achieve this by using the celebrated result of Simeon Reich.

**Key Words and Phrases:** Iterative method, accretive operator, proximal point algorithm.

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