Zeroes of Monotone Operators and Proximal Point Algorithms

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Abstract

We consider some proximal point algorithms with errors for a maximal monotone operator in a real Hilbert space, and show the strong convergence of the iterative scheme to a zero of the maximal monotone operator, without assuming neither the boundedness of the error sequence, nor that the zero set of the operator is nonempty. We present also some applications of our results.