

# Proximal point method for approximating zeros of accretive operators and fixed points of nonexpansive mappings

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**Abstract.** We study the proximal point method for approximating a common zero of an accretive operator and a fixed point of a nonexpansive mapping in Banach spaces. We prove that the sequence generated by the proposed algorithm converges strongly to a solution of the problem. We present also some applications and numerical experiments of our results.

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