

Regularization Methods for Accretive Variational Inequality

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Abstract: In this report, we consider a regularization method base on the Browder - Tikhonov and iterative regularization method that can be used to find a solution of a class of accretive variational inequalities in a uniformly smooth Banach space, and the solutions are sought in the set of common fixed points of nonexpansive mappings. We also study a combination of proposed regularization method with inertial proximal point method and one another of regularization method with iterative scheme under the assumption of a strongly accretive and Lipschitz continuous mapping. Our results generalize and extend some well-known regularization methods in the literature.

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