

APPROXIMATION SOLVABILITY OF A CLASS OF A-MONOTONE VARIATIONAL INCLUSION PROBLEMS IN SEMI-INNER PRODUCT SPACES

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Abstract. In this paper, we prove the existence of solutions for a class of nonlinear variational inclusion problems in semi-inner product spaces. We construct an iterative algorithm for approximating the solution for the class of variational inclusions involving A-monotone operators by using the resolvent operator technique.

Keywords. Variational inclusion, Maximal monotone mapping, Resolvent operator, Semi-inner product space, 2-uniformly smooth Banach space.

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