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On Two Properties of Enlargements of Maximal Monotone Operators

We give an answer to an open problem regarding the full enlargeability of a maximal monotone operator $S: X \rightrightarrows X^*$ by S^{se} , the smallest enlargement belonging to a certain class of enlargements associated to S. Moreover, we prove the weak^{*} closedness of the set $S_{h_S}(\varepsilon_1, x) + T_{h_T}(\varepsilon_2, x)$ under a weak generalized interior regularity condition.

Keywords: Monotone operator, Fitzpatrick function, representative function, enlargement, subdifferential.

MSC: 47H05, 46N10, 42A50