MATHEMATICA, Tome 55 (78), N° 1, 2013, pp. 15–21

AN IMPROVED LOCAL CONVERGENCE ANALYSIS FOR SECANT–LIKE METHOD

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Abstract. We provide a local convergence analysis for Secant–like algorithm for solving nonsmooth variational inclusions in Banach spaces. An existence– convergence theorem and an improvement of the ratio of convergence of this algorithm are given under center–conditioned divided difference and Aubin's continuity concept. Our result compare favorably with related obtained in [18].

MSC 2010. 65K10, 65G99, 47H04, 49M15.

Key words. Banach space, Secant-like method, generalized equation, Aubin continuity, ratio of convergence, divided difference, set-valued map.

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