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Dan D. Pascali* (dp39@nyu.edu), 251 Mercer Street, New York, NY 10012-1185. *On the index solvability for variational inequalities with (S)-mappings.*

Recent investigations on the topological degree for (S)-mappings with maximal monotone perturbations allows us to introduce a related index of solvability. On the other hand, a variational inequality can be converted into a inclusion determined by a sum of a mapping of monotone type and a subdifferential. This talk enlarges the hypotheses which permit to derive the existence of solutions of variational inequalities when the corresponding index of solvability is different from zero. (Received September 12, 2008)