Duality for Generalized Vector Variational Inequalities with Respect to Variable Domination Structures

Rosalind Elster *

Abstract

Giannessi introduced vector variational inequalities in 1980 in a finitedimensional setting. Within the last three decades, vector variational inequalities have been studied and extended intensively and have found many applications in various branches of pure and applied mathematics (see [1]). A crucial extension of the problem which was brought by Giannessi is to consider variational inequalities with variable domination structures which may vary dependently on the actual element in the linear space. In this talk, we consider a generalized vector variational inequality with respect to a variable domination structure and present duality results for these problems.

References

[1] GIANNESSI, F. (ed.): Vector Variational Inequalities and Vector Equilibria: Mathematical Theories, Nonconvex Optimization and its Applications, Kluwer Academic Publishers, **38**, Dordrecht, Netherlands, 2000.

^{*}Halle, Germany r.elster@t-online.de