

Duality for equilibrium problems under generalized monotonicity

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Abstract

Duality is studied for an abstract equilibrium problem which includes, among others, optimization problems and variational inequality problems. Following different schemes, various duals are proposed and primal-dual relationships are established under certain generalized convexity and generalized monotonicity assumptions. In a primal-dual setting, existence results for a solution are derived for different generalized monotone equilibrium problems within each duality scheme.

Keywords

Duality schemes, Equilibrium problems, Generalized convexity, Generalized monotonicity