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Noncooperative games with vector payoffs under relative pseudomonotonicity

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Abstract

We consider the Nash equilibrium problem with vector payoffs in a topological vector space. By employing the recent concept of relative (pseudo) monotonicity, we establish several existence results for vector Nash equilibria and vector equilibria. The results strengthen in a major way existence results for vector equilibrium problems which were based on the usual (generalized) monotonicity concepts.

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Keywords

Existence results, Nash equilibria, Relative (pseudo) monotonicity, Vector equilibria, Vector payoffs