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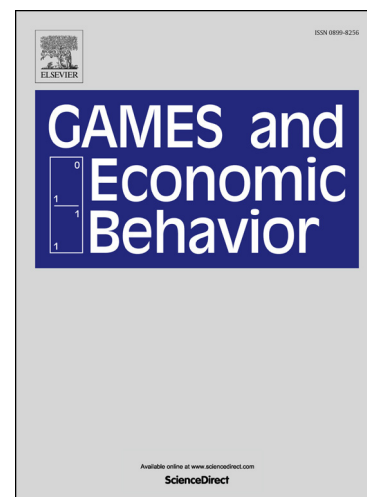
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Belief-Free Rationalizability and Informational Robustness*

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Abstract

We propose an incomplete information version of rationalizability. An action is said to be belief-free rationalizable if it survives the following iterated deletion process. At each stage, we delete actions for a type of a player that are not a best response to some conjectures of the player. The conjecture has to put positive weight only on states, and types and actions of the other players which that type thinks possible, and actions of those types that have survived so far. We analyze some economic applications under this solution concept.

This solution concept characterizes the implications of equilibrium when a player is known to have some private information but may have additional information. It thus answers the "informational robustness" question of what we can say about the set of outcomes that may arise in equilibrium of a Bayesian game if players may observe some additional information.

JEL CLASSIFICATION: C72, C79, D82, D83.

KEYWORDS: Incomplete Information, Informational Robustness, Bayes Correlated Equilibrium, Interim Correlated Rationalizability, Belief-Free Rationalizability.

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