PANTHÉON-ASSAS UNIVERSITÉ PARIS

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LEMMA
Laboratoire d'économie mathématique et de microéconomie appliquée

SÉMINAIRE

A BELIEF-BASED APPROACH TO SIGNALING

04 juin 2024
Lemma - Salle Maurice Desplas 4 rue Blaise Desgoffe 75006 PARIS

Séminaire du Lemma

Le LEMMA organise un séminaire, sur le thème « ***A belief-based approach to signaling*** » le mardi 4 juin à 11h.

Marie LACLAU (CNRS, HEC Paris)

Résumé :

In this paper, we provide a geometric characterization of the set of interim equilibrium payoffs in a general class of signaling games. To obtain a tractable characterization, we use the belief-based approach found in the literature on repeated games with incomplete information, cheap talk and Bayesian persuasion. This approach avoids to specify the prior, the strategies of the sender and receiver, and the belief system. The key ingredient is to consider Bayes-plausible belief distributions that are incentive-compatible for the sender.
Geometrically, this leads to a constrained convexification of the graphs of the interim value correspondences. Our characterization extends the analogous result for sender-receiver cheap talk games. We illustrate the results with some classical signaling games. We derive the best equilibrium payoff for the sender when his preferences are type-independent. For zero-sum preferences, we obtain an explicit formula for the ex-ante equilibrium payoff and establish a simple condition for the uniqueness of interim equilibrium payoffs.