

Seminar AGCO

Speaker: Felipe Garrido, LAMSADE, Université Paris Dauphine - PSL.

Title: Stable matching games.

Abstract: Gale and Shapley (1962) introduced a matching problem between two sets of agents M and W , who need to be paired by taking into account that each agent on one side of the market has an exogenous preference order over the agents of the other side. They defined a matching as stable if no unmatched pair can both improve their payoffs by breaking their couples and forming a new one. They proved the existence of a stable matching using a deferred-acceptance algorithm. Shapley and Shubik (1971) extended the model by allowing monetary transfers. Our article offers a further extension by assuming that matched couples obtain their payoff endogenously as the outcome of a strategic-form game they have to play. A matching, together with a strategy profile, is externally stable if no unmatched pair can break their couples, form a new one and play a strategy profile in their game such that both of them improve their payoffs. It is internally stable if no agent, by individually changing its strategy inside its couple, can increase its payoff without breaking the external stability of its couple. We prove the existence of an externally and internally stable matching in a large class of problems including zero-sum games, strictly competitive games, potential games and infinitely repeated games. We also prove that our main model encompasses and refines matching with monetary transfers as well as matching with contracts.

Wednesday, April 21, 14:30 hrs (Chilean time).

Dónde: <https://zoom.us/j/97375770036?pwd=TmxQVjRmRGRTYWdFqd2FrcFNFNWdEdz09>

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