



Departamento de  
Teoría e Historia  
Económica

## **Seminario: Elena Iñarra (Universidad del País Vasco)**

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**Título:** Do Nonstrategic Considerations Matter for Behavior in Games? An Experimental Study Informed by Direct-sum Decompositions of Games

**Sala:** E28

**Hora:** 12:30

**Abstract:** Experimental studies have shown that Nash equilibrium has clear limitations in regard to its ability to describe how people behave in games. In this paper, we use direct-sum decomposition proposed by Candogan et al. (2011) to decompose any normal-form finite game into the strategic and the nonstrategic components. How does individual behavior react to changes in the nonstrategic component? Nash equilibrium, as any other strategic solution, is invariant to changes in the nonstrategic component. Other solution concepts, such as Pareto efficient outcomes, depend on both components. Mutual-Max-Sum, a new solution concept proposed in this paper, depends only on the nonstrategic component. We design 3x3 games, informed by the direct-sum decomposition of games, to empirically test, whether and when, manipulations in the nonstrategic component affect individual behavior and whether Mutual-Max-Sum is behaviorally relevant. We find that changes in the nonstrategic component affect individual behavior but that Mutual-Max-Sum is mostly behaviorally irrelevant except when it coincides with the Pareto outcome of the game.

