

# Héctor Hermida Rivera

## *Presentation Title*

### **The Implementability of Cooperative Solutions**

## *Abstract*

This paper explores the relation between the Nash program and Implementation Theory. Using an approach that very naturally associates an implementation problem with any set of transferable utility games, we show that the Core is the only major cooperative solution concept that is Nash implementable (Propositions 1 to 4). Keeping this approach, we then show that all cooperative solution concepts are virtually implementable in Nash equilibrium strategies (Propositions 5 and 6). Moreover, we also show that if there are at least three agents, any cooperative solution concept is undominated Nash implementable (Propositions 3, 7 and 8) and subgame perfect implementable (Propositions 3 and 10). We finally show that even if there are just two agents, the Core is undominated Nash and subgame perfect implementable (Propositions 9 and 11).

## *Keywords*

Nash Program, Implementation Theory

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