

Thesis Defense

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Title:

**A Method for Determining the Dimension of an Assignment
Game's Core**

Abstract:

We consider a particular class of transferable-utility cooperative games, the assignment game of Shapley and Shubik (1972). An equivalence relation, due to Nunez and Rafels (2008), is defined on the player set based on the optimal matchings in the game. Players are defined as inactive if their core payoff is constant, and active otherwise. The contribution of this thesis is a theorem which makes possible an efficient characterization of a given equivalence class of players as active or inactive. This results in a polynomial-time method for determining the dimension of the game's core.

Date: 04/26/2010

Time: 12:30-2:00

Location: FA 219