Conferencias
Doctorado en Ingeniería Matemática, Estadística e Investigación Operativa (IMEIO-UCM-UPM)

Gerard van der Laan
VU University Amsterdam

The Average Tree Permission Value for Games with a Permission Tree

Abstract

In the literature various models of games with restricted cooperation can be found. In those models, instead of allowing for all subsets of the set of players to form, it is assumed that the set of feasible coalitions is a subset of the power set of the set of players. In this paper we consider such sets of feasible coalitions that follow from a permission structure on the set of players, in which players need permission to cooperate with other players. We assume the permission structure to be an oriented tree. This means that there is one player at the top of the permission structure and for every other player there is a unique directed path from the top player to this player. We introduce a new solution for these games based on the idea of the Average Tree value for cycle-free communication graph games. We provide two axiomatizations for this new value and compare it with the conjunctive permission value.

Organizado por el Grupo de Teoría de Juegos y Aplicaciones y el IMI.

Fecha: jueves 24 de octubre de 2013, a las 13:30h.
Sala de Grados de la Facultad de Estudios Estadísticos, UCM

Welfare distribution in international river disputes: the average tree solution

Abstract

Along an international river agents (countries) allocate from upstream to downstream. Water is allocated optimally to maximize total welfare. The problem is how to distribute welfare amongst the agents.

To consider this problem the international river problem is modeled as a cooperative game. Then, cooperative game solutions are applied. In these solutions we take into account principles of international water law.

Organizado por el Grupo de Teoría de Juegos y Aplicaciones, el Departamento de Estadística e Investigación Operativa y el IMI.

Fecha: viernes 25 de octubre de 2013, a las 12:30h.
Seminario 215, Facultad de CC Matemáticas, UCM

Instituto de Matemática Interdisciplinar