



Departamento de  
Teoría e Historia  
Económica

## **Seminario: Lluís Puig-Gonzalez (University of York)**

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Seminarios 2024-2025

**Título:** Planting Tree Game under Loss Averse Landowners: an Evolutionary approach

**Sala:** E22

**Hora:** 12:30

**Resumen:** The coordination of planting decisions in neighbour lands can promote biodiversity enrichment, but with the risk of getting biological damage that could worsen the economic value of the land. In this paper, we focus on the landowners' decisions to either plant a trees or not, under the presence of two potential scenarios: one where there is a biodiversity expansion or, another, where pest/disease occurs. This decision environment is extended to a game between two landowners. Additionally, we will stress the variables of the game to reach a  $2 \times 2$  game, where both joint planting and joint not planting become the two (pure strategy) Nash equilibria. After characterising them with the concepts of pay-off, risk and loss dominance; we will extend the game to a repeated one, with the goal of understanding the stochastic stability equilibrium. Some analysis with respect to the parameters of the game will be applied to explore whether landowners can be induced to coordinate their planting decisions.

