

AGCO Seminar

Speaker: Claudio Telha, U de los Andes.

Title: A sequential Stackelberg game for dynamic inspection problems.

Abstract:

This talk considers a game where an inspection authority must verify that a set of operators adhere to a certain rule. The inspector has time to inspect only a few operators, and this must be done sequentially. The operators disclose the sequence of inspections as they occur.

We will discuss variants of this sequential game. The talk focuses on the mathematical structure of the set of equilibria of this inspection game, where the inspector is a Stackelberg leader and is capable of performing exactly two inspections. A static and dynamic version of the game are analyzed. In the static game, the inspection paths are the solutions to a transportation problem. This equivalence is then used to determine an explicit solution. We discuss how the static and dynamic games relate to each other. In particular, we show they lead to the same utility value for the inspector.

Most of the contents of this talk is based on joint work with Cristóbal Guzmán, Javiera Rizzo, and Mathieu Van Vyve and was published at EJOR.

When: May 29, 3:00pm.

Where: Sala de Seminario John Von Neumann, 7th floor, CMM, Av. Beauchef 851, Torre Norte.

