

AGCO Seminar

Speaker: Maximilian Fichtl, DII, U Chile

Title: Computing Bayes-Nash Equilibria in Auctions via Online Learning.

Abstract:

Auction games are a central application of game theory in economics. However, while explicit formulas for Bayes-Nash equilibria are known for particular auction settings, we generally have to rely on numerical methods to predict the outcomes of auctions. We present a simple class of learning algorithms to approximate Bayes-Nash equilibria in these games. Surprisingly, while recent theoretical results suggest that such algorithms perform poorly in general matrix games, we provide experimental evidence that they perform very well in many different auction scenarios.

Despite the positive experimental results, proving the convergence of these algorithms remains an open problem - even in very basic settings. We provide some insights and known preliminary results towards answering this question.

When: November 8, 3:00pm.

Where: Sala de Seminario John Von Neumann, CMM, Beauchef 851, Torre Norte.

