

Seminario AGCO

Expositor: Dana Pizarro, Universidad de Chile.

Título: The value of observability in dynamic pricing.

Dónde: <https://zoom.us/j/96413520511?pwd=dUVaZDdPNTF6dGFkTnYzNHVLckxrdz09>

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Cuándo: Miércoles 10 de Junio 2020, 15:45 hrs.

Abstract:

Research on dynamic pricing has been growing during the last four decades due to its use in practice by a variety of companies as well as the several model variants that can be considered. In particular, we consider the pricing problem where a firm wants to sell one item to a single buyer in order to maximize expected revenues. On one hand, the firm commits to a price function over an infinite horizon. On the other, the buyer has a private value for the item and purchases at the time when his utility is maximized. In our model, the buyer is more impatient than the seller. When the seller can observe the arrival of the buyer, she can make the price function contingent on the buyer's arrival time. On the contrary, when the seller cannot observe the arrival, her price function is fixed at time zero for the whole horizon. That motivates us to study how important is to observe the buyer time arrival in terms of the seller's expected revenue.

In this talk, I will bound the value of observability, defined as the worst case ratio between the expected revenue of the seller when she observes the buyer's arrival and that when she does not.

This is joint work with José Correa and Gustavo Vulcano