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AGCO Seminar

Speaker: Dana Pizarro, UOH.

Title**:** Competition and Recall in Selection Problems.

Abstract: In this talk, I will present an extension of the prophet inequality problem to a competitive setting. At every period, a new sample from a known distribution arrives, which is publicly observed. Then, two players simultaneously decide whether to pick an available value or to pass and wait until the next period (ties are broken uniformly at random). As soon as a player gets one sample, he leaves the market, and his payoff is the value of the sample. In a first variant, namely no recall case, the agents can only bid in each period for the current value. In a second variant, the full recall case, the agents can also bid at each period for any of the previous samples that have not been already selected. For each variant, we study the two-player game induced by the optimal stopping problem, focusing on subgame-perfect Nash equilibria. In particular, I will describe the set of subgame-perfect Nash equilibria payoffs, I will compare the two model variants in terms of the payoffs of the players and I will provide tight bounds for the Price of Anarchy and Price of Stability of the former setting when the number of arrivals is two.

Joint work with Fabien Gensbittel and Jérôme Renault (TSE).

When**:** December 7, **15:00 hrs.**

Where**:** Sala de Seminario John Von Neuman, CMM, Beauchef 851, Torre Norte, Piso 7.