



# Colóquio Interinstitucional

## Modelos Estocásticos e Aplicações

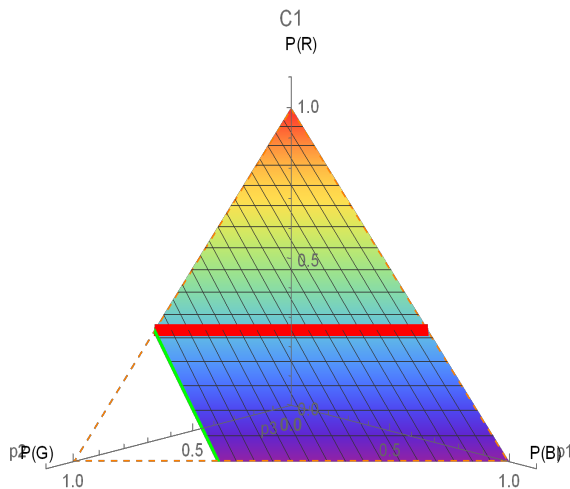
Quinta-feira, 22 de julho de 2021

### Programa

14:00 - 15:00h – José Heleno Faro (Insper)

#### *Dynamically Consistent Objective and Subjective Rationality*

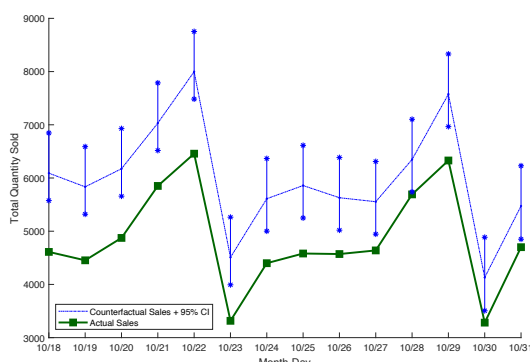
A group of experts, for instance climate scientists, is to choose among two policies  $f$  and  $g$ . Consider the following decision rule. If all experts agree that the expected utility of  $f$  is higher than the expected utility of  $g$ , the unanimity rule applies, and  $f$  is chosen. Otherwise, the precautionary principle is implemented and the policy yielding the highest minimal expected utility is chosen. This decision rule may lead to time inconsistencies when an intermediate period of partial resolution of uncertainty is added. We show how to coherently reassess the initial set of experts' beliefs so that choices become dynamically consistent: new beliefs should be added until one obtains the smallest "rectangular set" that contains the original one. Our analysis offers a novel behavioral characterization of rectangularity and a prescriptive way to aggregate opinions in order to avoid sure regret.



15:20 - 16:20h – Marcelo Cunha Medeiros (PUC-Rio)

#### *Counterfactual Analysis with Artificial Controls: Inference, High Dimensions and Nonstationarity*

Recently, there has been growing interest in developing statistical tools to conduct counterfactual analysis with aggregate data when a single "treated" unit suffers an intervention, such as a policy change, and there is no obvious control group. Usually, the proposed methods are based on the construction of an artificial counterfactual from a pool of "untreated" peers, organized in a panel data structure. In this paper, we consider a general framework for counterfactual analysis for high-dimensional, nonstationary data with either deterministic and/or stochastic trends, which nests well-established methods, such as the synthetic control. We propose a resampling procedure to test intervention effects that does not rely on postintervention asymptotics and that can be used even if there is only a single observation after the intervention. A simulation study is provided as well as an empirical application.



### Local

#### Google Meet

<https://meet.google.com/hjr-wkvz-tyi>

Para participar por telefone, disque +1 316-778-8055 e digite este PIN: 534 154 505#



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Realização:



Apoio:

