Prof François SALANIÉ
Toulouse School of Economics

title: "Catastrophes, Delays, and Learning"
abstract:
We develop a simple but general model of experimentation in which reaching untried levels of a stock variable may, after a stochastic delay, lead to a catastrophe. Hence, at any point in time a catastrophe might well be under way, due to past experiments. We show how to measure this legacy of the past from prior beliefs and the chronicle of stock levels. We characterize the optimal policy as a function of the legacy, and we show how it leads to a new protocol for planning that applies to a general class of problems, encompassing the study of pandemics or climate change. Several original policy predictions follow, e.g., experimentation can stop but resume later.