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Titolo: Dynamic models for a fast-changing world

Abstract: Everyone knows the adagio: 'It is difficult to make predictions, especially about the future.' In Economics, it is even worse. As Robert Lucas forcefully argued, rational agents will adapt to the new conditions expected to prevail after a shock by changing their behavior, thereby inducing variability in the parameters of the models. This talk will first present compelling evidence of parameter time-variation in Economics and Finance at all time scales. A short review of an effective modeling approach named the observation-driven time-varying parameter framework will follow. Finally, the focus will move to a model where, in agreement with the Lucas Critique, structural shocks drive both the macro variables' evolution and the parameters' dynamics. Contrary to existing approaches where parameters follow a stochastic process with random and exogenous shocks, the new specification allows the evolution of the parameters to be driven by realized past shocks, thus opening the possibility to gauge the impact of observed shocks and hypothetical policy interventions on the future evolution of the economic system.