February 10, 2025 2:00pm-3:00pm KAP 414

Prof. Nizar Touzi (New York University)

Martingale Distributionally Robust Sensitivity and model risk hedging

Abstract: We investigate model risk distributionally robust sensitivities for functionals on the Wasserstein space when the underlying model is constrained to the martingale class and/or is subject to constraints on the first marginal law. Our results extend the findings of Bartl, Drapeau, Obloj & Wiesel by introducing the minimization of the distributionally robust problem with respect to semi-static hedging strategies. We provide explicit characterizations of the model risk (first order) optimal semi-static hedging strategies. The distributional robustness is analyzed both in terms of the adapted Wasserstein metric and the more relevant standard Wasserstein metric.

Zoom Link: USC Math Finance Colloquium

Join Zoom Meeting https://usc.zoom.us/j/94973619069?pwd=VnU5bVIMc1pzVTIEYUVaZUYyNSt6UT09

Meeting ID: 949 7361 9069 Passcode: 925028