ICTS Seminar

Title	:	From Quadratic Hawkes Processes to Super Heston Rough Volatility
Speaker	:	Aditi Dandapani
Date	:	Monday, 1st March 2021
Time	:	09:30 am (IST)

Abstract : Using microscopic price models based on Hawkes processes, it has been shown that under some no-arbitrage condition, the high degree of endogene- ity of markets together with the phenomenon of metaorders splitting generate rough Heston-type volatility at the macroscopic scale. One additional impor- tant feature of financial dynamics, at the heart of several influential works in econophysics, is the so-called feedback or Zumbach effect. This essentially means that past trends in returns convey significant information on future volatility. A natural way to reproduce this property in microstructure mod- eling is to use quadratic versions of Hawkes processes. We show that after suitable rescaling, the long term limits of these processes are refined versions of rough Heston models where the volatility coefficient is enhanced compared to the square root characterizing Heston-type dynamics. Furthermore the Zumbach effect remains explicit in these limiting rough volatility model

Venue : Please click on the link to join the meeting.
https://zoom.us/j/94796230456?pwd=UkFxZG9WWi9COXliUGtZaWVsQ3Z1dz09
Meeting ID: 947 9623 0456
Passcode: 734458