

June 14, 2012 @ 15.00

SISSA Main Building - Room 132 - first floor

"Modeling financial asset dynamics on the basis of the scaling symmetry. Can the approach be extended to food prices time series?"

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Abstract:

On the basis of empirical evidence, we show how the scaling symmetry can be used as a guideline to construct a synthetic stochastic model for financial assets dynamics. The model includes an endogenous memory component and exogenous volatility jumps. Analytical closed-form calculations allow the implementation of efficient calibration procedures and numerical simulation algorithms. In view of the presence of the memory component, the model offers the possibility of performing conditioned forecasts on future behavior. With the help of the audience, we will address the question of whether the approach can be extended to describe food prices time series.