Econophysics

Within the study of complex systems, the interest of some physicists has recently been addressed towards the definition and use of models for quantitative finance, giving rise to a new discipline named Econophysics. In this framework the financial markets, being the result of an interaction between many agents, can be considered as the prototype of a complex system, whose behaviour is therefore analyzed by using methodologies inherited from statistical mechanics and theoretical physics. With the Chair Econophysics we intend to present a multidisciplinary approach to the analysis of complexity in economic and financial systems, endeavouring to create a constructive interaction and synergy between two communities of excellence - the first undertaking academic research in quantitative sciences, the second operating in the framework of economics and financial institutions - with the long term goal of building a common language and methodology.

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Find an up-to-date calendar on: www.unisi.it/santachiara

Con il contributo di FONDAZIONE MONTE DEI PASCHI DI SIENA

SantaChiara Scuola Superiore

UNIVERSITA' DEGLI STUDI DI SIENA

ECONOPHYSICS

April – June 2009

Santa Chiara Scuola Superiore

Physics and Complex Systems

UNIVERSITA' DEGLI STUDI DI SIENA

LECTURES

Stylized facts in financial markets	28 April 2009 h. 15 – Aula Meeting
Correlation and hierarchies in financial markets	29 April 2009 h. 15 – Aula Meeting
Multivariate analysis and modeling of complex systems	30 April 2009 h. 10 – Aula Meeting
Data production, data mining and data modeling in finance and economics	18 May 2009 h. 15 – Auditorium
Agent based models: formulation, description and numerical simulations	19 May 2009 h. 15 – Aula Meeting
Microstructure of a double auction market	21 May 2009 h. 15 – Aula Meeting
Causes and sources of heterogeneity in markets and social systems	22 May 2009 h. 10 – Aula Meeting
Investment profiles of classes of investors: empirical evidence	15 June 2009 h. 15 – Aula Meeting
Firm growth dynamics	16 June 2009 h. 11 – Aula Meeting
Networks in economic and financial systems	18 June 2009 h. 11 – Aula Meeting

Chair in **Econophysics**

Prof. Rosario N. Mantegna