Worksop on “Statistical Physics for the Digital Economy”

July 11 (Room TBC)

Session 1 – Chair: Tomaso Aste

15.00 – 15.30 Richard Olsen (Lykke)
Alpha Engine: designing an automated trading engine (Abstract)

15.30 – 16.00 Paolo Tasca (University College London)
Technical, legal and business challenges faced by Blockchain enabled systems (Abstract)

16.00 – 16.30 Fabio Caccioli (University College London)
Excess reciprocity distorts reputation in online social networks (Abstract)

16.30 – 17.00 Giulio Cimini (IMT Lucca)
Algorithms for reputation and quality in scientific e-communities (Abstract)

17.00 – 17.30 Coffee break - Presentation of the BARAC project

Session 2 – Chair: Giacomo Livan

17.30 – 18.00 Rosario Mantegna (Università di Palermo)
Price discovery and market liquidity at NASDAQ Nordic OMX exchanges (Abstract)

18.00 – 18.30 Hideki Takayasu (Sony Computer Science Laboratories, Tokyo)
Transition between Poisson and Non-Poisson Fluctuations in Sales Numbers (Abstract)

18.30 – 19.00 Tiziano Squartini (IMT Lucca)
Maximum-entropy models for networks (Abstract)

19.00 – 19.30 Sebastian Poledna (Complexity Science Hub, Vienna)
An empirically calibrated large-scale agent-based model for an entire national economy (Abstract)

July 12 (Room TBC)

Session 3 – Chair: Tiziana Di Matteo

15.00 – 15.30 Imre Kondor (Parmenides Foundation, Pullach)
Variance optimization with no short positions (Abstract)

15.30 – 16.00 Luciano Pietronero (Università La Sapienza, Rome)
Firms’ complexity: Technological scope, coherence and performance (Abstract)

16.00 – 16.30 Misako Takayasu (Tokyo Institute of Technology)
Growth dynamics of complex business firms network (Abstract)

16.30 – 17.00 Mateusz Wilinski (University of Warsaw)
Intraday correlation structure for high frequency financial data (Abstract)

17.00 – 17.30 Coffee break

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17.30 – 18.00 Henrik Jensen (Imperial College London)
*Evolutionary dynamics of neighborhood economic status in cities* (Abstract)

18.00 – 18.30 Andrea Gabrielli (CNR Rome)
*The scientific and technological competitiveness of nations: a network analysis* (Abstract)

18.30 – 19.00 Andrea Rapisarda (Università di Catania)
*A multilayer approach for price dynamics in financial markets* (Abstract)

19.00 – 19.30 Giovanni Petri (ISI Foundation, Turin)
*Topological data analysis for complex systems* (Abstract)